FORM 3

AMENDED REPORT ☑

**STATE OF UTAH**
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

## APPLICATION FOR PERMIT TO DRILL

**1. WELL NAME and NUMBER**
Monument Butte East State H-36-8-16

**2. TYPE OF WORK**
DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○

**3. FIELD OR WILDCAT**
MONUMENT BUTTE

**4. TYPE OF WELL**
Oil Well Coalbed Methane Well: NO

**5. UNIT or COMMUNITIZATION AGREEMENT NAME**
GMBU (GRRV)

**6. NAME OF OPERATOR**
NEWFIELD PRODUCTION COMPANY

**7. OPERATOR PHONE**
435 646-4825

**8. ADDRESS OF OPERATOR**
Rt 3 Box 3630 , Myton, UT, 84052

**9. OPERATOR E-MAIL**
mcrozier@newfield.com

**10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)**
ML-22061

**11. MINERAL OWNERSHIP**
FEDERAL ○ INDIAN ○ STATE ◉ FEE ○

**12. SURFACE OWNERSHIP**
FEDERAL ○ INDIAN ○ STATE ◉ FEE ○

**13. NAME OF SURFACE OWNER (if box 12 = 'fee')**

**14. SURFACE OWNER PHONE (if box 12 = 'fee')**

**15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')**

**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**

**17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')**

**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS**
YES ○ (Submit Commingling Application) NO ◉

**19. SLANT**
VERTICAL ○ DIRECTIONAL ◉ HORIZONTAL ○

| 20. LOCATION OF WELL | FOOTAGES | QTR-QTR | SECTION | TOWNSHIP | RANGE | MERIDIAN |
|---|---|---|---|---|---|---|
| LOCATION AT SURFACE | 1896 FNL 1955 FEL | SWNE | 36 | 8.0 S | 16.0 E | S |
| Top of Uppermost Producing Zone | 1280 FNL 2597 FEL | NWNE | 36 | 8.0 S | 16.0 E | S |
| At Total Depth | 1280 FNL 2597 FEL | NWNE | 36 | 8.0 S | 16.0 E | S |

**21. COUNTY**
DUCHESNE

**22. DISTANCE TO NEAREST LEASE LINE (Feet)**
1280

**23. NUMBER OF ACRES IN DRILLING UNIT**
20

**25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)**
1431

**26. PROPOSED DEPTH**
MD: 6501 TVD: 6501

**27. ELEVATION - GROUND LEVEL**
5459

**28. BOND NUMBER**
B001834

**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE**
43-7478

## ATTACHMENTS

**VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES**

☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**

☑ **COMPLETE DRILLING PLAN**

☐ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**

☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**

☑ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**

☑ **TOPOGRAPHICAL MAP**

| | | |
|---|---|---|
| **NAME** Mandie Crozier | **TITLE** Regulatory Tech | **PHONE** 435 646-4825 |
| **SIGNATURE** | **DATE** 08/17/2009 | **EMAIL** mcrozier@newfield.com |

**API NUMBER ASSIGNED**
43013501110000

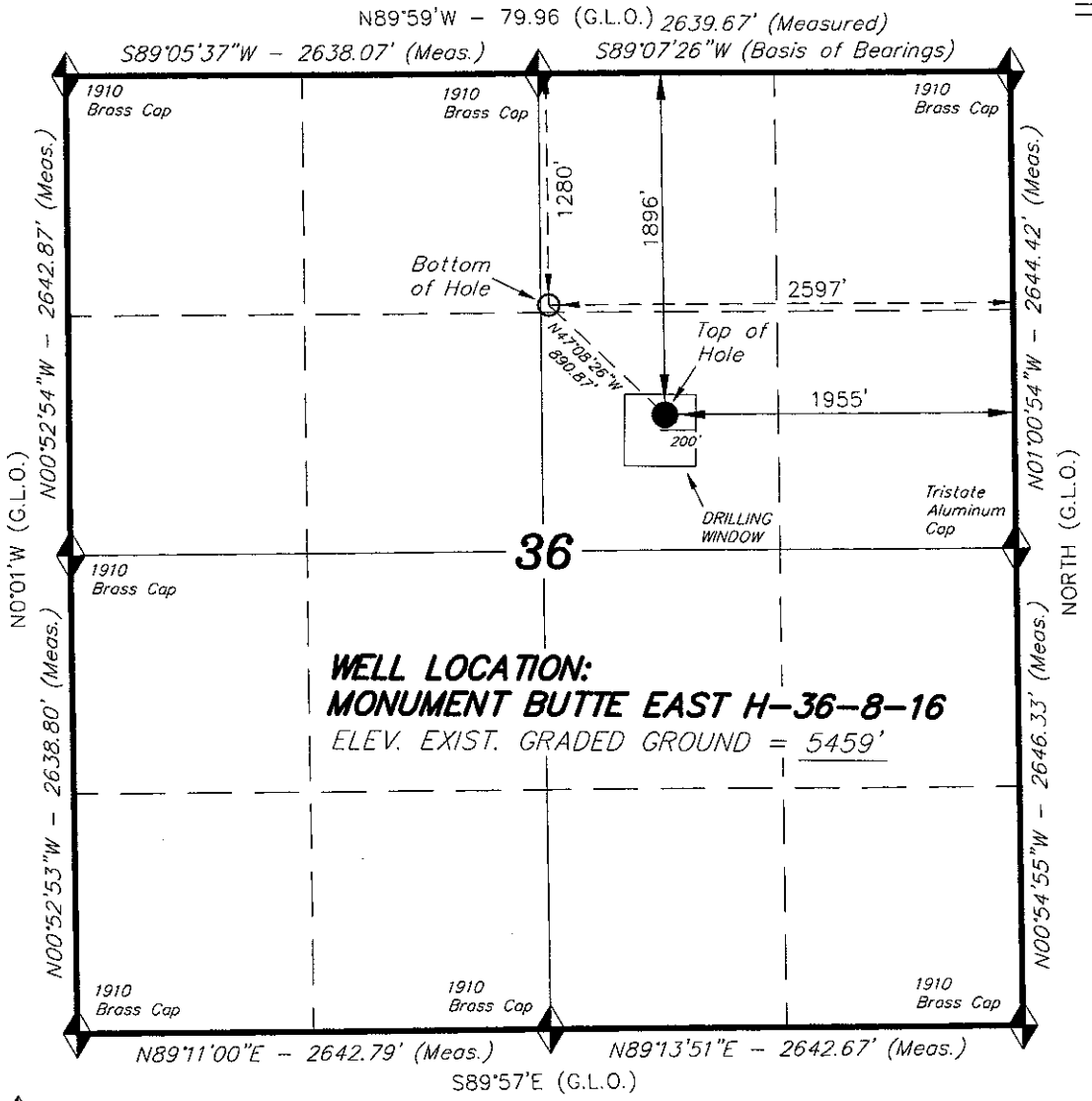
**APPROVAL**

Permit Manager

| Proposed Hole, Casing, and Cement | | | | | | |
|---|---|---|---|---|---|---|
| **String** | **Hole Size** | **Casing Size** | **Top (MD)** | **Bottom (MD)** | | |
| Prod | 7.875 | 5.5 | 0 | 6501 | | |
| **Pipe** | **Grade** | **Length** | **Weight** | | | |
| | Grade J-55 LT&C | 6501 | 15.5 | | | |
| | | | | | | |

| Proposed Hole, Casing, and Cement | | | | | | |
|---|---|---|---|---|---|---|
| **String** | **Hole Size** | **Casing Size** | **Top (MD)** | **Bottom (MD)** | | |
| Surf | 12.25 | 8.625 | 0 | 500 | | |
| **Pipe** | **Grade** | **Length** | **Weight** | | | |
| | Grade J-55 ST&C | 500 | 24.0 | | | |
| | | | | | | |

# T8S, R16E, S.L.B.&M.




**WELL LOCATION:**
**MONUMENT BUTTE EAST H-36-8-16**
ELEV. EXIST. GRADED GROUND = 5459'

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are base on LOCATION: an N.G.S. OPUS Correction. LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

*MONUMENT BUTTE EAST H-36-8-16*
*(Surface Location) NAD 83*
*LATITUDE = 40° 04' 35.13"*
*LONGITUDE = 110° 03' 55.19"*

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, MONUMENT BUTTE EAST H-36-8-16, LOCATED AS SHOWN IN THE SW 1/4 NE 1/4 OF SECTION 36, T8S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

1000' 500' 0' 1000'
BAR SCALE

N

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR No. 189377 STATE OF UTAH

STACY W. STEWART
REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781-2501

| | |
|---|---|
| DATE SURVEYED: 06-17-09 | SURVEYED BY: T.H. |
| DATE DRAWN: 06-25-09 | DRAWN BY: F.T.M. |
| REVISED: 08-21-09 F.T.M. | SCALE: 1" = 1000' |

'APIWellNo:43013501110000'

NEWFIELD

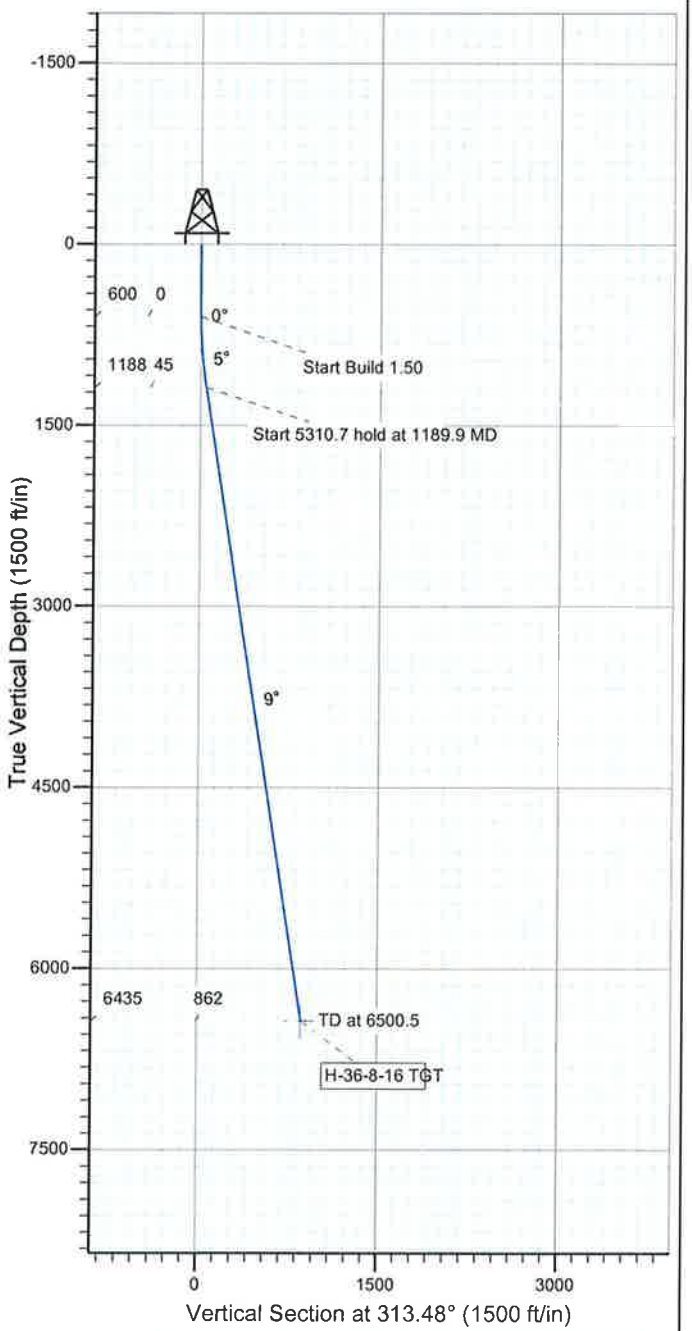
Project: USGS Myton SW (UT)
Site: SECTION 36
Well: H-36-8-16
Wellbore: Wellbore #1
Design: Design #1

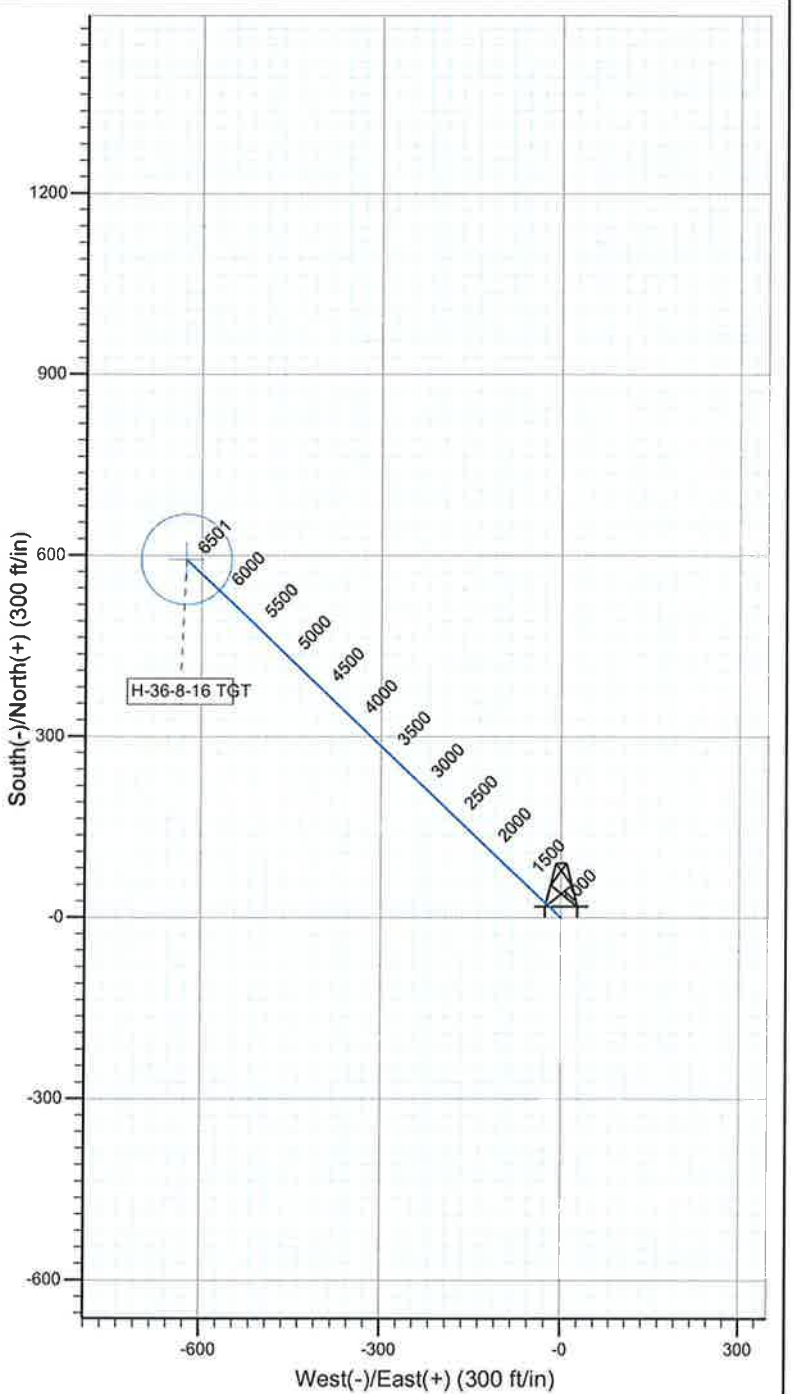
T M

Azimuths to True North
Magnetic North: 11.55°

Magnetic Field
Strength: 52506.4snT
Dip Angle: 65.88°
Date: 2009/07/16
Model: IGRF200510

KOP @ 600'
DOGLEG RATE 1.5 DEG/100
TARGET RADIUS IS 75'




WELLBORE TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Shape |
|---|---|---|---|---|
| H-36-8-16 TGT | 6435.0 | 593.4 | -625.7 | Circle (Radius: 75.0) |

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1189.9 | 8.85 | 313.48 | 1187.5 | 31.3 | -33.0 | 1.50 | 313.48 | 45.5 | |
| 4 | 6500.5 | 8.85 | 313.48 | 6435.0 | 593.4 | -625.7 | 0.00 | 0.00 | 862.3 | H-36-8-16 TGT |

HATHAWAY HB BURNHAM
DIRECTIONAL & MWD SERVICES

'APIWellNo:43013501110000'

NEWFIELD

# NEWFIELD EXPLORATION

**USGS Myton SW (UT)**
**SECTION 36**
**H-36-8-16**

**Wellbore #1**

**Plan: Design #1**

# Standard Planning Report

**16 July, 2009**

HATHAWAY HB BURNHAM
DIRECTIONAL & MWD SERVICES

'APIWellNo:43013501110000'

NEWFIELD

# HATHAWAY BURNHAM
## Planning Report

HATHAWAY BURNHAM
DIRECTIONAL & MWD SERVICES

| | | | |
|---|---|---|---|
| **Database:** | EDM 2003.21 Single User Db | **Local Co-ordinate Reference:** | Well H-36-8-16 |
| **Company:** | NEWFIELD EXPLORATION | **TVD Reference:** | H-36-8-16 @ 5471.0ft |
| **Project:** | USGS Myton SW (UT) | **MD Reference:** | H-36-8-16 @ 5471.0ft |
| **Site:** | SECTION 36 | **North Reference:** | True |
| **Well:** | H-36-8-16 | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Design #1 | | |

| **Project** | USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA | | |
|---|---|---|---|
| **Map System:** | US State Plane 1983 | **System Datum:** | Mean Sea Level |
| **Geo Datum:** | North American Datum 1983 | | |
| **Map Zone:** | Utah Central Zone | | Using geodetic scale factor |

| **Site** | SECTION 36, SEC 26 T8S, R16E | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 7,202,697.00 ft | **Latitude:** | 40° 5' 3.401 N |
| **From:** | Lat/Long | **Easting:** | 2,045,250.00 ft | **Longitude:** | 110° 3' 10.915 W |
| **Position Uncertainty:** | 0.0 ft | **Slot Radius:** | " | **Grid Convergence:** | 0.93 ° |

| **Well** | H-36-8-16, SHL LAT 40 04 35.13, LONG -110 03 55.18 | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | -2,861.1 ft | **Northing:** | 7,199,781.36 ft | **Latitude:** | 40° 4' 35.130 N |
| | **+E/-W** | -3,440.6 ft | **Easting:** | 2,041,856.02 ft | **Longitude:** | 110° 3' 55.180 W |
| **Position Uncertainty** | | 0.0 ft | **Wellhead Elevation:** | ft | **Ground Level:** | 5,337.0 ft |

| **Wellbore** | Wellbore #1 | | | | |
|---|---|---|---|---|---|
| **Magnetics** | **Model Name** | **Sample Date** | **Declination (°)** | **Dip Angle (°)** | **Field Strength (nT)** |
| | IGRF200510 | 2009/07/16 | 11.55 | 65.88 | 52,506 |

| **Design** | Design #1 | | | | |
|---|---|---|---|---|---|
| **Audit Notes:** | | | | | |
| **Version:** | | **Phase:** | PROTOTYPE | **Tie On Depth:** | 0.0 |
| **Vertical Section:** | **Depth From (TVD) (ft)** | **+N/-S (ft)** | **+E/-W (ft)** | **Direction (°)** | |
| | 6,435.0 | 0.0 | 0.0 | 313.48 | |

**Plan Sections**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,189.9 | 8.85 | 313.48 | 1,187.5 | 31.3 | -33.0 | 1.50 | 1.50 | 0.00 | 313.48 | |
| 6,500.5 | 8.85 | 313.48 | 6,435.0 | 593.4 | -625.7 | 0.00 | 0.00 | 0.00 | 0.00 | H-36-8-16 TGT |

'APIWellNo:43013501110000'

NEWFIELD

# HATHAWAY BURNHAM

## Planning Report

HATHAWAY BURNHAM DIRECTIONAL & MWD SERVICES

| | | | |
|---|---|---|---|
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| **Site:** | SECTION 36 | **North Reference:** | True |
| **Well:** | H-36-8-16 | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Design #1 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 1.50 | 313.48 | 700.0 | 0.9 | -0.9 | 1.3 | 1.50 | 1.50 | 0.00 |
| 800.0 | 3.00 | 313.48 | 799.9 | 3.6 | -3.8 | 5.2 | 1.50 | 1.50 | 0.00 |
| 900.0 | 4.50 | 313.48 | 899.7 | 8.1 | -8.5 | 11.8 | 1.50 | 1.50 | 0.00 |
| 1,000.0 | 6.00 | 313.48 | 999.3 | 14.4 | -15.2 | 20.9 | 1.50 | 1.50 | 0.00 |
| 1,100.0 | 7.50 | 313.48 | 1,098.6 | 22.5 | -23.7 | 32.7 | 1.50 | 1.50 | 0.00 |
| 1,189.9 | 8.85 | 313.48 | 1,187.5 | 31.3 | -33.0 | 45.5 | 1.50 | 1.50 | 0.00 |
| 1,200.0 | 8.85 | 313.48 | 1,197.5 | 32.4 | -34.1 | 47.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 8.85 | 313.48 | 1,296.3 | 42.9 | -45.3 | 62.4 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 8.85 | 313.48 | 1,395.2 | 53.5 | -56.4 | 77.8 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 8.85 | 313.48 | 1,494.0 | 64.1 | -67.6 | 93.2 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 8.85 | 313.48 | 1,592.8 | 74.7 | -78.8 | 108.5 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 8.85 | 313.48 | 1,691.6 | 85.3 | -89.9 | 123.9 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 8.85 | 313.48 | 1,790.4 | 95.9 | -101.1 | 139.3 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 8.85 | 313.48 | 1,889.2 | 106.4 | -112.2 | 154.7 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 8.85 | 313.48 | 1,988.0 | 117.0 | -123.4 | 170.1 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 8.85 | 313.48 | 2,086.8 | 127.6 | -134.6 | 185.4 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 8.85 | 313.48 | 2,185.6 | 138.2 | -145.7 | 200.8 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 8.85 | 313.48 | 2,284.4 | 148.8 | -156.9 | 216.2 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 8.85 | 313.48 | 2,383.3 | 159.4 | -168.0 | 231.6 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 8.85 | 313.48 | 2,482.1 | 169.9 | -179.2 | 247.0 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 8.85 | 313.48 | 2,580.9 | 180.5 | -190.4 | 262.4 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 8.85 | 313.48 | 2,679.7 | 191.1 | -201.5 | 277.7 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 8.85 | 313.48 | 2,778.5 | 201.7 | -212.7 | 293.1 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 8.85 | 313.48 | 2,877.3 | 212.3 | -223.9 | 308.5 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 8.85 | 313.48 | 2,976.1 | 222.9 | -235.0 | 323.9 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 8.85 | 313.48 | 3,074.9 | 233.5 | -246.2 | 339.3 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 8.85 | 313.48 | 3,173.7 | 244.0 | -257.3 | 354.6 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 8.85 | 313.48 | 3,272.5 | 254.6 | -268.5 | 370.0 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 8.85 | 313.48 | 3,371.4 | 265.2 | -279.7 | 385.4 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 8.85 | 313.48 | 3,470.2 | 275.8 | -290.8 | 400.8 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 8.85 | 313.48 | 3,569.0 | 286.4 | -302.0 | 416.2 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 8.85 | 313.48 | 3,667.8 | 297.0 | -313.1 | 431.6 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 8.85 | 313.48 | 3,766.6 | 307.5 | -324.3 | 446.9 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 8.85 | 313.48 | 3,865.4 | 318.1 | -335.5 | 462.3 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 8.85 | 313.48 | 3,964.2 | 328.7 | -346.6 | 477.7 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 8.85 | 313.48 | 4,063.0 | 339.3 | -357.8 | 493.1 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 8.85 | 313.48 | 4,161.8 | 349.9 | -369.0 | 508.5 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 8.85 | 313.48 | 4,260.6 | 360.5 | -380.1 | 523.8 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 8.85 | 313.48 | 4,359.5 | 371.0 | -391.3 | 539.2 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 8.85 | 313.48 | 4,458.3 | 381.6 | -402.4 | 554.6 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 8.85 | 313.48 | 4,557.1 | 392.2 | -413.6 | 570.0 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 8.85 | 313.48 | 4,655.9 | 402.8 | -424.8 | 585.4 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 8.85 | 313.48 | 4,754.7 | 413.4 | -435.9 | 600.8 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 8.85 | 313.48 | 4,853.5 | 424.0 | -447.1 | 616.1 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 8.85 | 313.48 | 4,952.3 | 434.5 | -458.2 | 631.5 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 8.85 | 313.48 | 5,051.1 | 445.1 | -469.4 | 646.9 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 8.85 | 313.48 | 5,149.9 | 455.7 | -480.6 | 662.3 | 0.00 | 0.00 | 0.00 |

'APIWellNo:43013501110000'



| | | | |
|---|---|---|---|
| **Database:** | EDM 2003.21 Single User Db | **Local Co-ordinate Reference:** | Well H-36-8-16 |
| **Company:** | NEWFIELD EXPLORATION | **TVD Reference:** | H-36-8-16 @ 5471.0ft |
| **Project:** | USGS Myton SW (UT) | **MD Reference:** | H-36-8-16 @ 5471.0ft |
| **Site:** | SECTION 36 | **North Reference:** | True |
| **Well:** | H-36-8-16 | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Design #1 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 5,300.0 | 8.85 | 313.48 | 5,248.7 | 466.3 | -491.7 | 677.7 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 8.85 | 313.48 | 5,347.6 | 476.9 | -502.9 | 693.0 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 8.85 | 313.48 | 5,446.4 | 487.5 | -514.0 | 708.4 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 8.85 | 313.48 | 5,545.2 | 498.1 | -525.2 | 723.8 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 8.85 | 313.48 | 5,644.0 | 508.6 | -536.4 | 739.2 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 8.85 | 313.48 | 5,742.8 | 519.2 | -547.5 | 754.6 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 8.85 | 313.48 | 5,841.6 | 529.8 | -558.7 | 770.0 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 8.85 | 313.48 | 5,940.4 | 540.4 | -569.9 | 785.3 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 8.85 | 313.48 | 6,039.2 | 551.0 | -581.0 | 800.7 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 8.85 | 313.48 | 6,138.0 | 561.6 | -592.2 | 816.1 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 8.85 | 313.48 | 6,236.8 | 572.1 | -603.3 | 831.5 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 8.85 | 313.48 | 6,335.7 | 582.7 | -614.5 | 846.9 | 0.00 | 0.00 | 0.00 |
| 6,500.5 | 8.85 | 313.48 | 6,435.0 | 593.4 | -625.7 | 862.3 | 0.00 | 0.00 | 0.00 |

**Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| H-36-8-16 TGT<br>- plan hits target<br>- Circle (radius 75.0) | 0.00 | 0.00 | 6,435.0 | 593.4 | -625.7 | 7,200,364.57 | 2,041,220.92 | 40° 4' 40.994 N | 110° 4' 3.229 W |

NEWFIELD PRODUCTION COMPANY
MONUMENT BUTTE EAST STATE H-36-8-16
AT SURFACE: SW/NE SECTION 36, T8S, R16E
DUCHESNE COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

| | |
|---|---|
| Uinta | 0 – 1730' |
| Green River | 1730' |
| Wasatch | 6501' |

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 1730' – 6501' – Oil

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

| | |
|---|---|
| Location & Sampled Interval | Date Sampled |
| Flow Rate | Temperature |
| Hardness | pH |
| Water Classification (State of Utah) | Dissolved Calcium (Ca) (mg/l) |
| Dissolved Iron (Fe) (ug/l) | Dissolved Sodium (Na) (mg/l) |
| Dissolved Magnesium (Mg) (mg/l) | Dissolved Carbonate ($CO_3$) (mg/l) |
| Dissolved Bicarbonate ($NaHCO_3$) (mg/l) | Dissolved Chloride (Cl) (mg/l) |
| Dissolved Sulfate ($SO_4$) (mg/l) | Dissolved Total Solids (TDS) (mg/l) |

**PROPOSED CASING PROGRAM:**

**a. Casing Design: Monument Butte East State H-36-8-16**

| Size | Interval | | Weight | Grade | Coupling | Design Factors | | |
|---|---|---|---|---|---|---|---|---|
| | Top | Bottom | | | | Burst | Collapse | Tension |
| Surface casing 8-5/8" | 0' | 500' | 24.0 | J-55 | STC | 2,950<br>10.52 | 1,370<br>8.61 | 244,000<br>20.33 |
| Prod casing 5-1/2" | 0' | 6,501' | 15.5 | J-55 | LTC | 4,810<br>2.33 | 4,040<br>1.95 | 217,000<br>2.15 |

Assumptions:
1) Surface casing max anticipated surface press (MASP) = Frac gradient – gas gradient
2) Prod casing MASP (production mode) = Pore pressure – gas gradient
3) All collapse calculations assume fully evacuated casing w/ gas gradient
4) All tension calculations assume air weight

| | |
|---|---|
| Frac gradient at surface casing shoe = | 13.0 ppg |
| Pore pressure at surface casing shoe = | 8.33 ppg |
| Pore pressure at prod casing shoe = | 8.33 ppg |
| Gas gradient = | 0.115 psi/ft |

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

**b. Cementing Design: Monument Butte East State H-36-8-16**

| Job | Fill | Description | Sacks<br>$ft^3$ | OH Excess* | Weight (ppg) | Yield ($ft^3$/sk) |
|---|---|---|---|---|---|---|
| Surface casing | 500' | Class G w/ 2% CaCl | 229<br>268 | 30% | 15.8 | 1.17 |
| Prod casing Lead | 4,501' | Prem Lite II w/ 10% gel + 3% KCl | 311<br>1014 | 30% | 11.0 | 3.26 |
| Prod casing Tail | 2,000' | 50/50 Poz w/ 2% gel + 3% KCl | 363<br>451 | 30% | 14.3 | 1.24 |

*Actual volume pumped will be 15% over the caliper log
- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

4. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

5. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to ±350 feet will be drilled with an air/mist system. From about 350 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite.

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

6. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

7. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 500' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

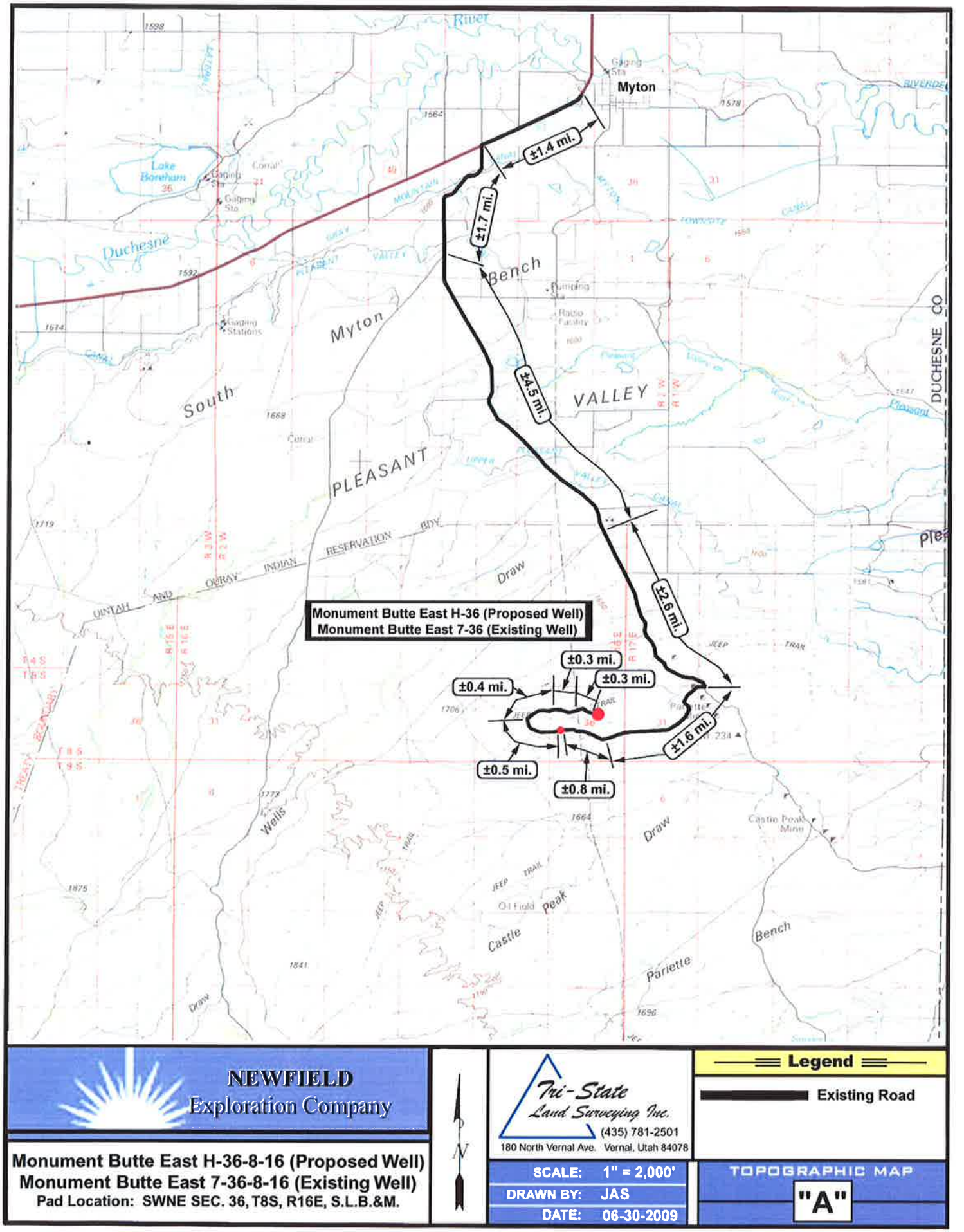
8. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

9. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the fourth quarter of 2009, and take approximately seven (7) days from spud to rig release.

'APIWellNo:43013501110000'




**NEWFIELD**
Exploration Company

**Monument Butte East H-36-8-16 (Proposed Well)**
**Monument Butte East 7-36-8-16 (Existing Well)**
**Pad Location: SWNE SEC. 36, T8S, R16E, S.L.B.&M.**

N

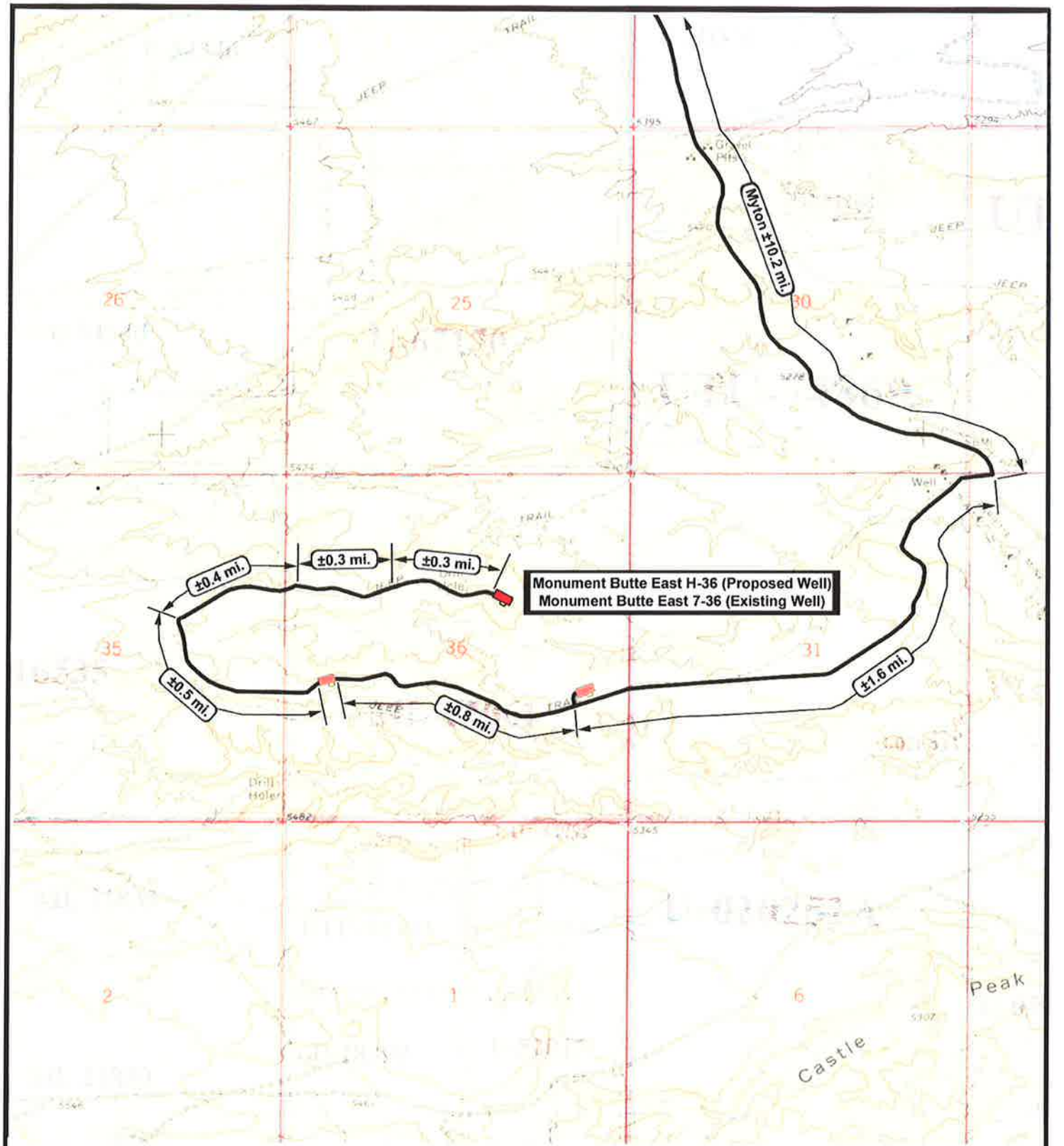
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

**Legend**
Existing Road

| | |
|---|---|
| SCALE: | 1" = 2,000' |
| DRAWN BY: | JAS |
| DATE: | 06-30-2009 |

TOPOGRAPHIC MAP
"A"

'APIWellNo:43013501110000'




**NEWFIELD**
Exploration Company

**Monument Butte East H-36-8-16 (Proposed Well)**
**Monument Butte East 7-36-8-16 (Existing Well)**
Pad Location: SWNE SEC. 36, T8S, R16E, S.L.B.&M.

N

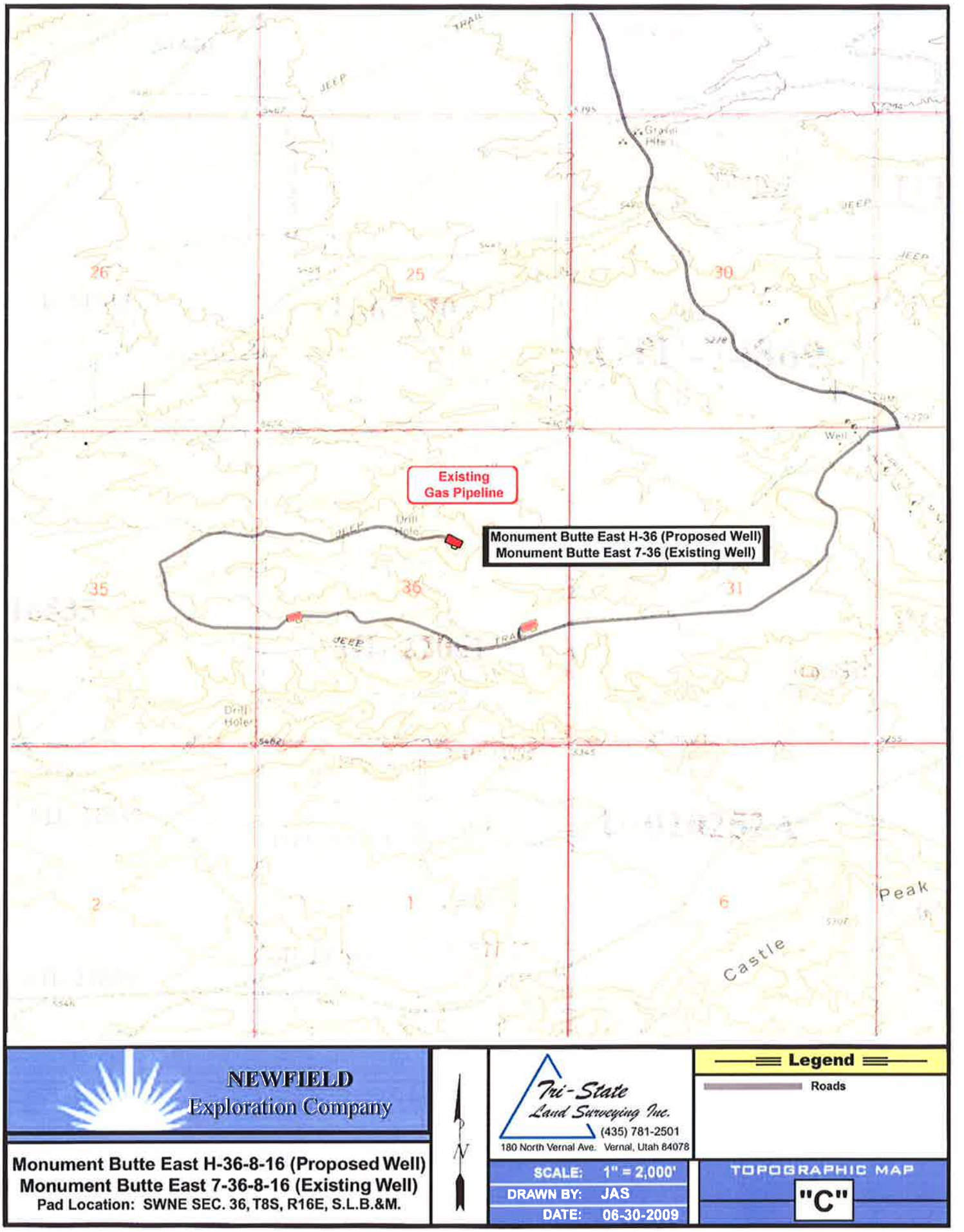
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: JAS
DATE: 06-30-2009

Legend
Existing Road

TOPOGRAPHIC MAP
"B"

'APIWellNo:43013501110000'




**NEWFIELD**
Exploration Company

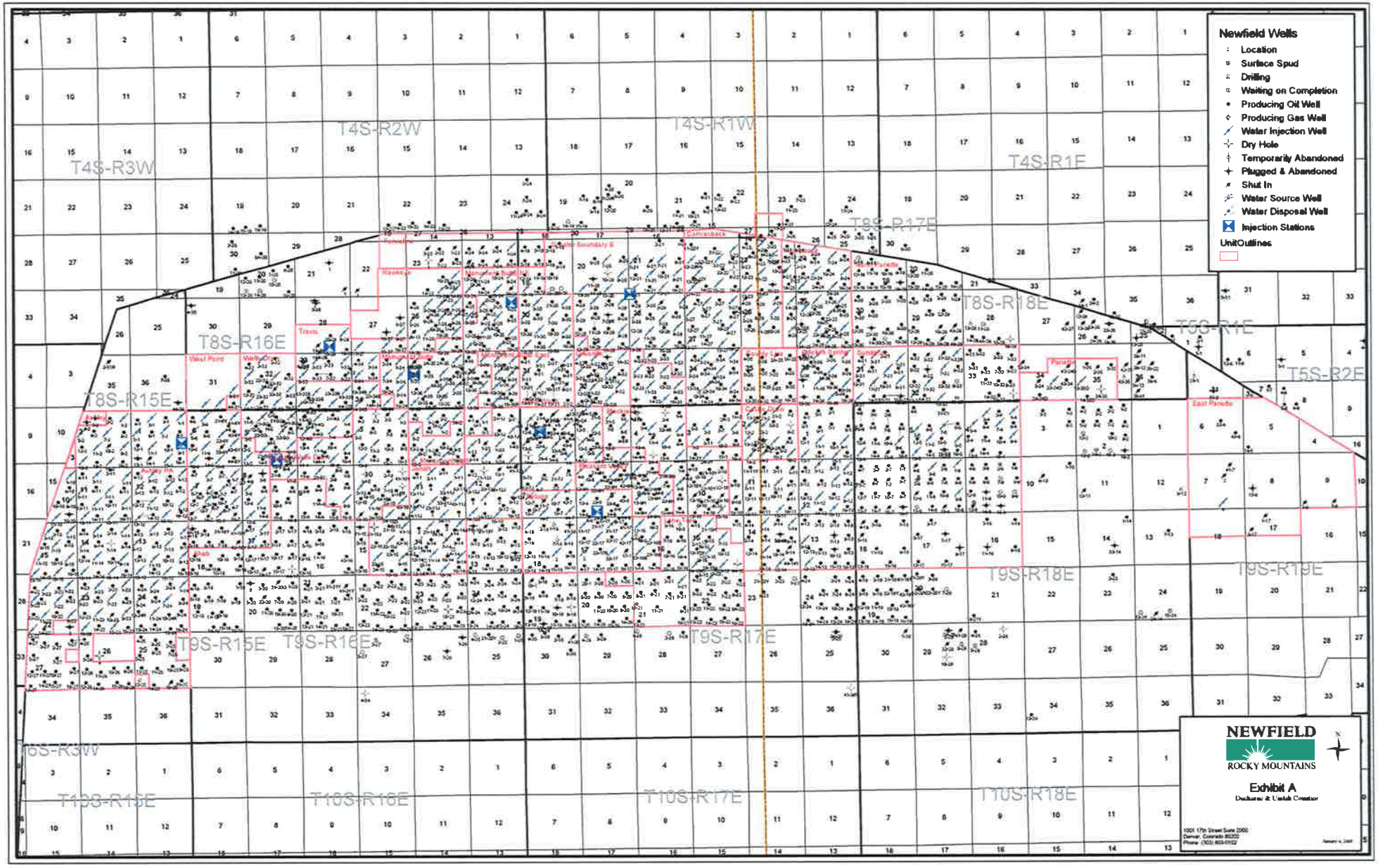
**Monument Butte East H-36-8-16 (Proposed Well)**
**Monument Butte East 7-36-8-16 (Existing Well)**
Pad Location: SWNE SEC. 36, T8S, R16E, S.L.B.&M.

Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: JAS
DATE: 06-30-2009

Legend
Roads

TOPOGRAPHIC MAP
"C"



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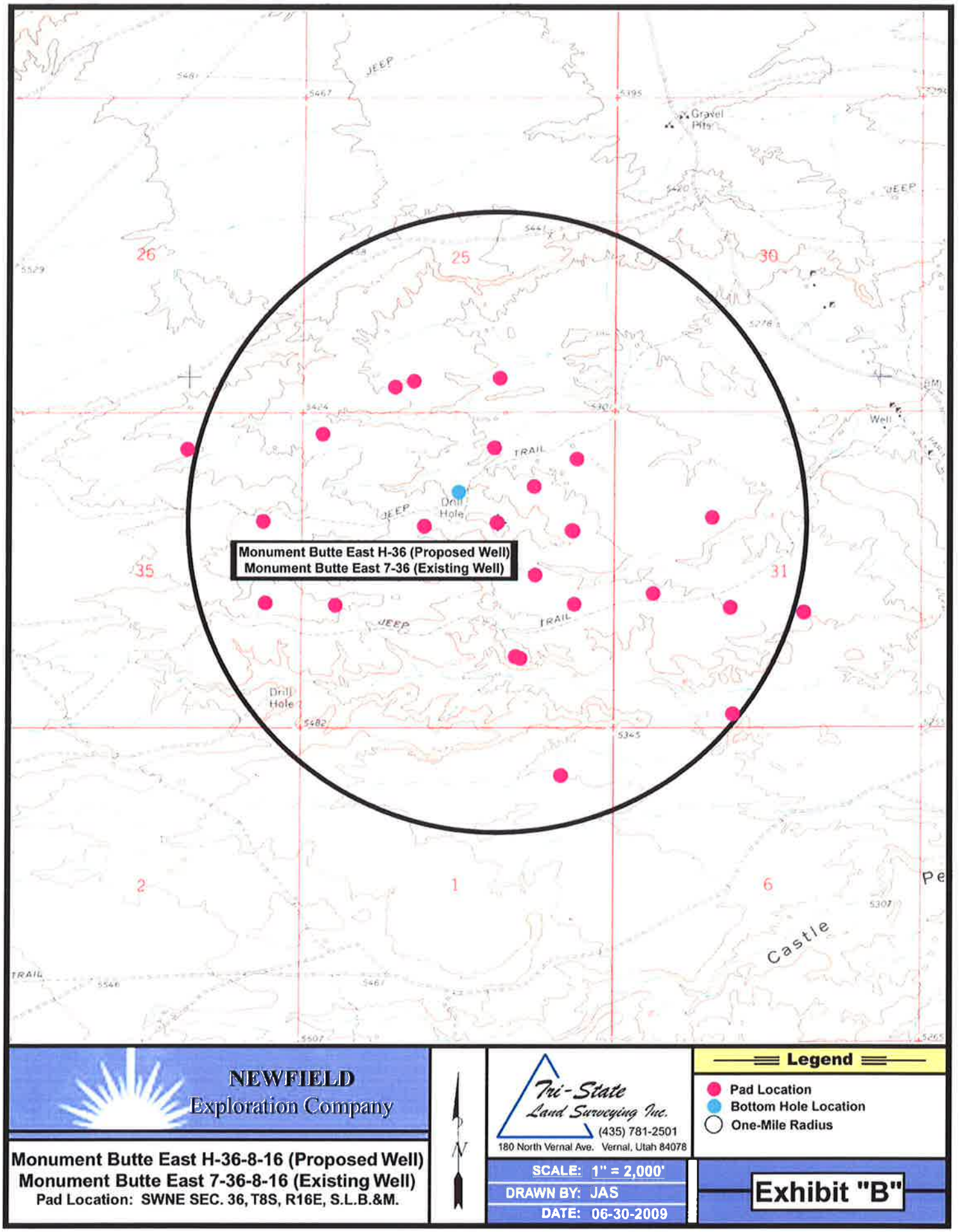



NEWFIELD Exploration Company

Monument Butte East H-36-8-16 (Proposed Well)
Monument Butte East 7-36-8-16 (Existing Well)
Pad Location: SWNE SEC. 36, T8S, R16E, S.L.B.&M.

N

Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: JAS
DATE: 06-30-2009

Legend
- Pad Location
- Bottom Hole Location
- One-Mile Radius

Exhibit "B"

NEWFIELD PRODUCTION COMPANY
MONUMENT BUTTE EAST STATE H-36-8-16
AT SURFACE: SW/NE SECTION 36, T8S, R16E
DUCHESNE COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. **EXISTING ROADS**

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site Monument Butte East State H-36-8-16 located in the SW ¼ NE ¼ Section 36, T8S, R16E, S.L.B. & M., Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles ± to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 – 8.8 miles ± to it's junction with an existing road to the west; proceed southwesterly – 2.9 miles ± to it's junction with an existing road to the northeast; proceed northeasterly – 1.0 miles to the existing 7-36-8-16 well location.

The highways mentioned in the foregoing paragraph are bituminous surfaced roads to the point where Highway 216 exists to the South, thereafter the roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County crews.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

2. **PLANNED ACCESS ROAD**

The is no proposed access road for this location. The proposed well will be drilled off of the existing 7-36-8-16 well pad. See attached **Topographic Map "B"**.

There will be no new gates or cattle guards required.

3. **LOCATION OF EXISTING WELLS**

Refer to **EXHIBIT B**.

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

The proposed well will be drilled directionally off of the existing 7-36-8-16 well pad. There will be a pumping unit and a short flow line added to the existing tank battery for the proposed H-36-8-16.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted Carlsbad Canyon. All facilities will be painted within six months of installation.

## 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District
Water Right: 43-7478

Neil Moon Pond
Water Right: 43-11787

Maurice Harvey Pond
Water Right: 47-1358

Newfield Collector Well
Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site.

## 6. SOURCE OF CONSTRUCTION MATERIALS

The proposed Monument Butte East State H-36-8-16 will be drilled off of the existing 7-36-8-16 well pad. No additional surface disturbance will be required for this location.

## 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the

produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

8. **ANCILLARY FACILITIES:**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

**Fencing Requirements**

All pits will be fenced according to the following minimum standards:

a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.

b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.

c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times

d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.

e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) **Producing Location**

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP:** State of Utah

12. **OTHER ADDITIONAL INFORMATION:**

a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.

b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.

c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

**Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

**Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the Monument Butte East State H-36-8-16, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Monument Butte East State H-36-8-16 Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:**

Representative

'APIWellNo:43013501110000'



Name: Tim Eaton
Address: Newfield Production Company
Route 3, Box 3630
Myton, UT 84052
Telephone: (435) 646-3721

Certification

Please be advised that Newfield Production Company is considered to be the operator of well #H-36-8-16, SW/NE Section 36, T8S, R16E, LEASE #ML-22061, Duchesne County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Bond #B001834.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

8/17/09
Date

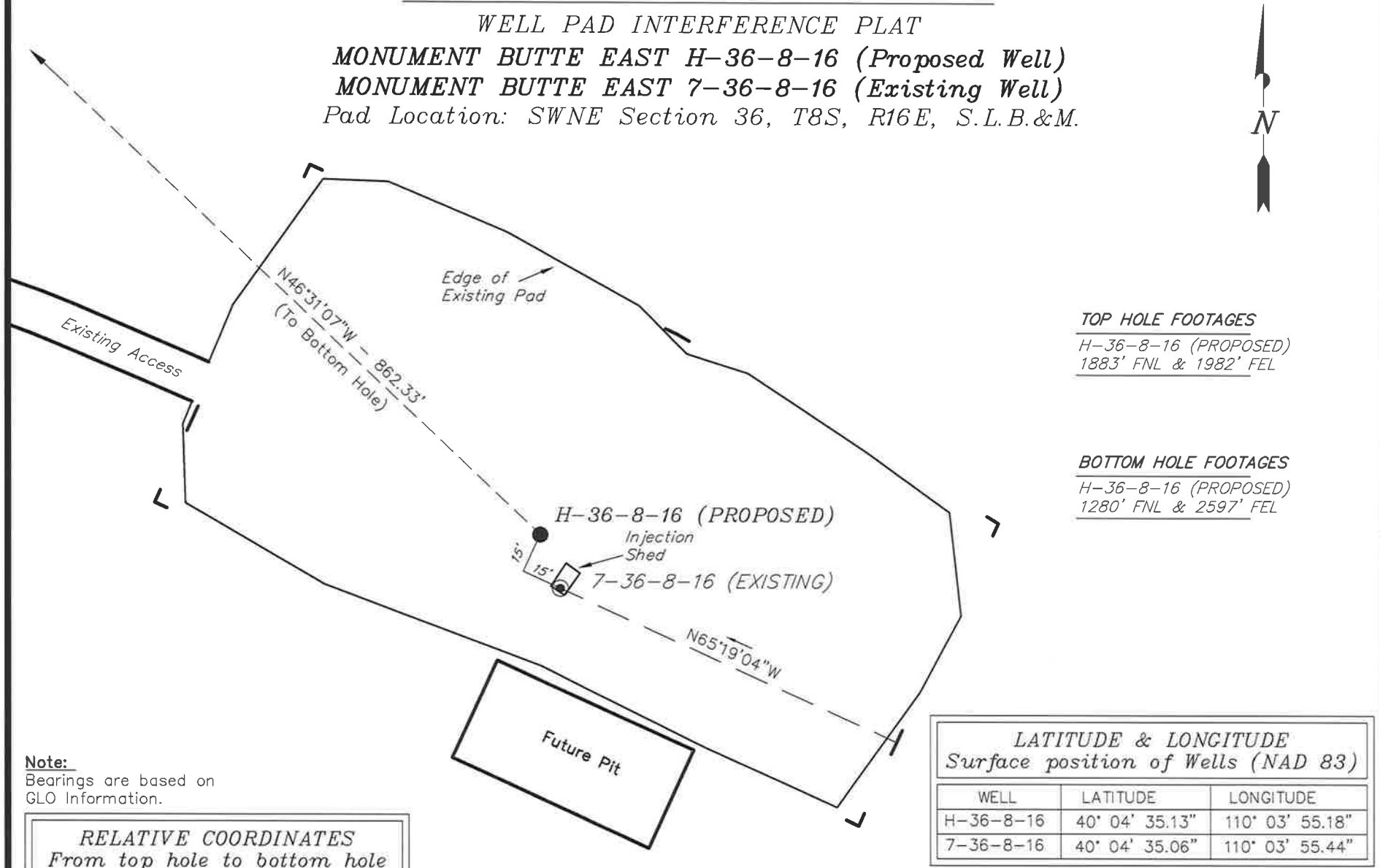
Mandie Crozier
Regulatory Specialist
Newfield Production Company

'API Well No: 43013501110000'

# NEWFIELD PRODUCTION COMPANY

## WELL PAD INTERFERENCE PLAT

**MONUMENT BUTTE EAST H-36-8-16 (Proposed Well)**
**MONUMENT BUTTE EAST 7-36-8-16 (Existing Well)**
Pad Location: SWNE Section 36, T8S, R16E, S.L.B.&M.




**TOP HOLE FOOTAGES**
H-36-8-16 (PROPOSED)
1883' FNL & 1982' FEL

**BOTTOM HOLE FOOTAGES**
H-36-8-16 (PROPOSED)
1280' FNL & 2597' FEL

**Note:**
Bearings are based on GLO Information.

*RELATIVE COORDINATES*
*From top hole to bottom hole*

| WELL | NORTH | EAST |
|---|---|---|
| H-36-8-16 | 593' | -626' |

*LATITUDE & LONGITUDE*
*Surface position of Wells (NAD 83)*

| WELL | LATITUDE | LONGITUDE |
|---|---|---|
| H-36-8-16 | 40° 04' 35.13" | 110° 03' 55.18" |
| 7-36-8-16 | 40° 04' 35.06" | 110° 03' 55.44" |

| | | | |
|---|---|---|---|
| SURVEYED BY: | T.H. | DATE SURVEYED: | 06-17-09 |
| DRAWN BY: | F.T.M. | DATE DRAWN: | 06-29-09 |
| SCALE: | 1" = 50' | REVISED: | |

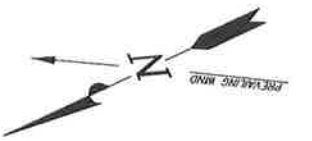

Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
(435) 781-2501

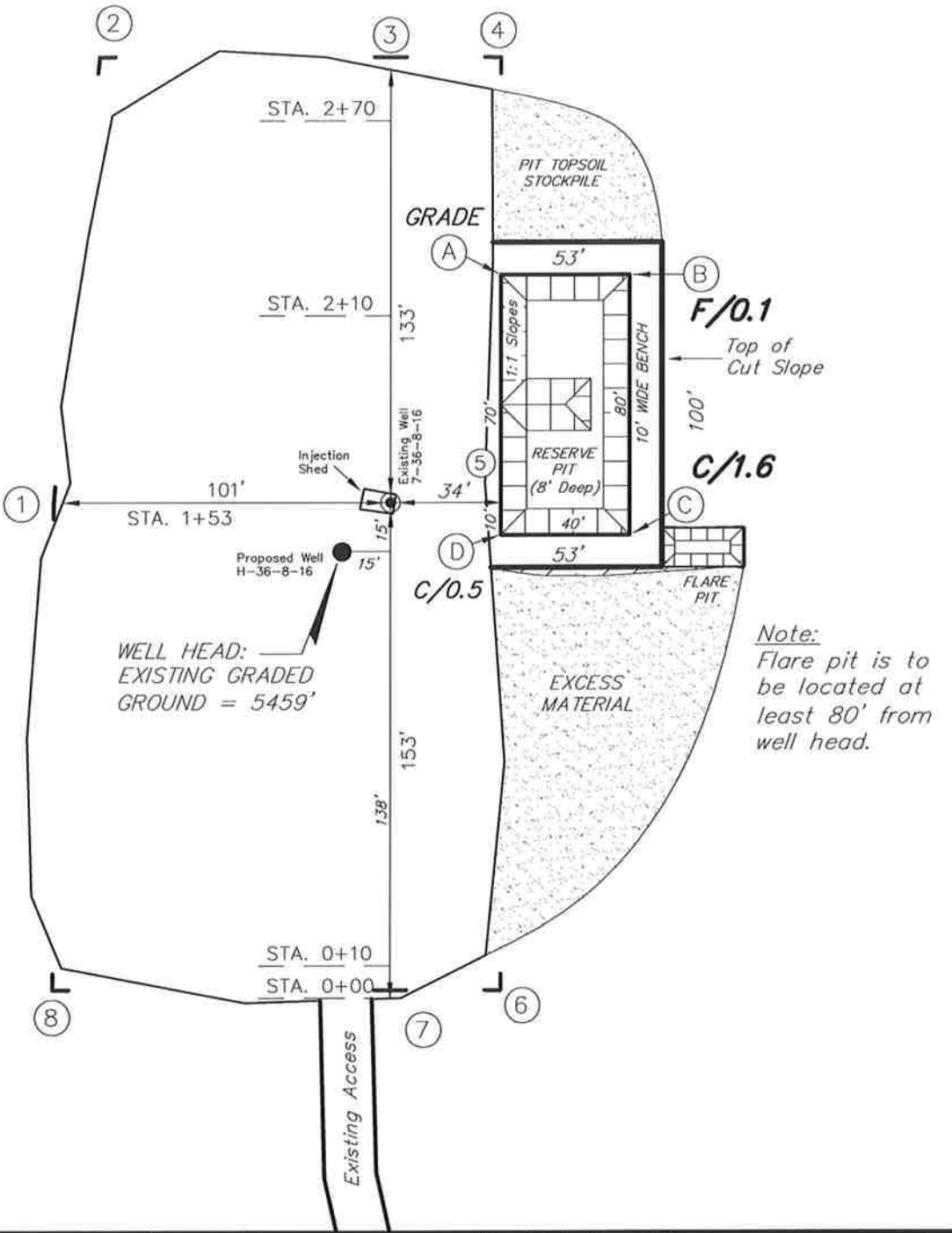
'APIWellNo:43013501110000'

# NEWFIELD PRODUCTION COMPANY

## MONUMENT BUTTE EAST H-36-8-16 (Proposed Well)
## MONUMENT BUTTE EAST 7-36-8-16 (Existing Well)

Pad Location: SWNE Section 36, T8S, R16E, S.L.B.&M.




Note:
Flare pit is to be located at least 80' from well head.

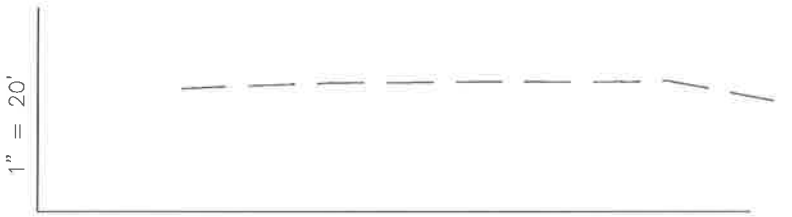
| | | | |
|---|---|---|---|
| SURVEYED BY: T.H. | DATE SURVEYED: 06-17-09 | Tri State Land Surveying, Inc. | (435) 781-2501 |
| DRAWN BY: F.T.M. | DATE DRAWN: 06-25-09 | 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 | |
| SCALE: 1" = 50' | REVISED: | | |

'APIWellNo:43013501110000'

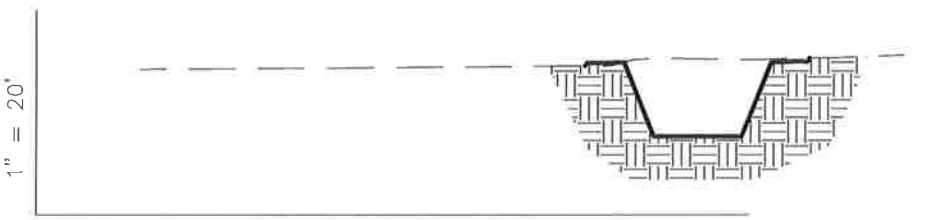
# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

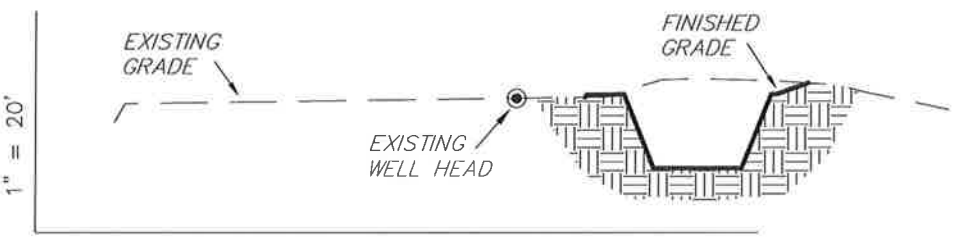
### MONUMENT BUTTE EAST H-36-8-16 (Proposed Well)
### MONUMENT BUTTE EAST 7-36-8-16 (Existing Well)



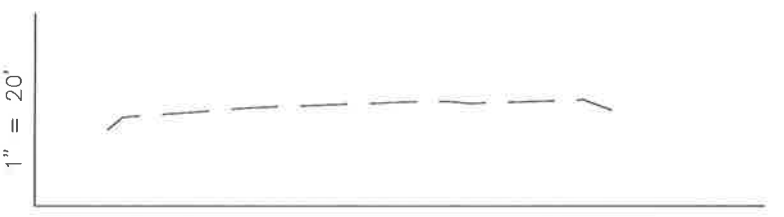

STA. 2+70




STA. 2+10




STA. 1+53




STA. 0+10

NOTE:
UNLESS OTHERWISE NOTED
CUT SLOPES ARE AT 1:1
FILL SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

| ITEM | CUT | FILL | 6" TOPSOIL | EXCESS |
|---|---|---|---|---|
| PAD | 170 | 10 | Topsoil is not included in Pad Cut | 160 |
| PIT | 640 | 0 | | 640 |
| TOTALS | 810 | 10 | 120 | 800 |

| | | | |
|---|---|---|---|
| SURVEYED BY: T.H. | DATE SURVEYED: | 06-17-09 | |
| DRAWN BY: F.T.M. | DATE DRAWN: | 06-25-09 | |
| SCALE: 1" = 50' | REVISED: | | |

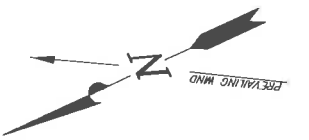

Tri State Land Surveying, Inc. (435) 781-2501
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

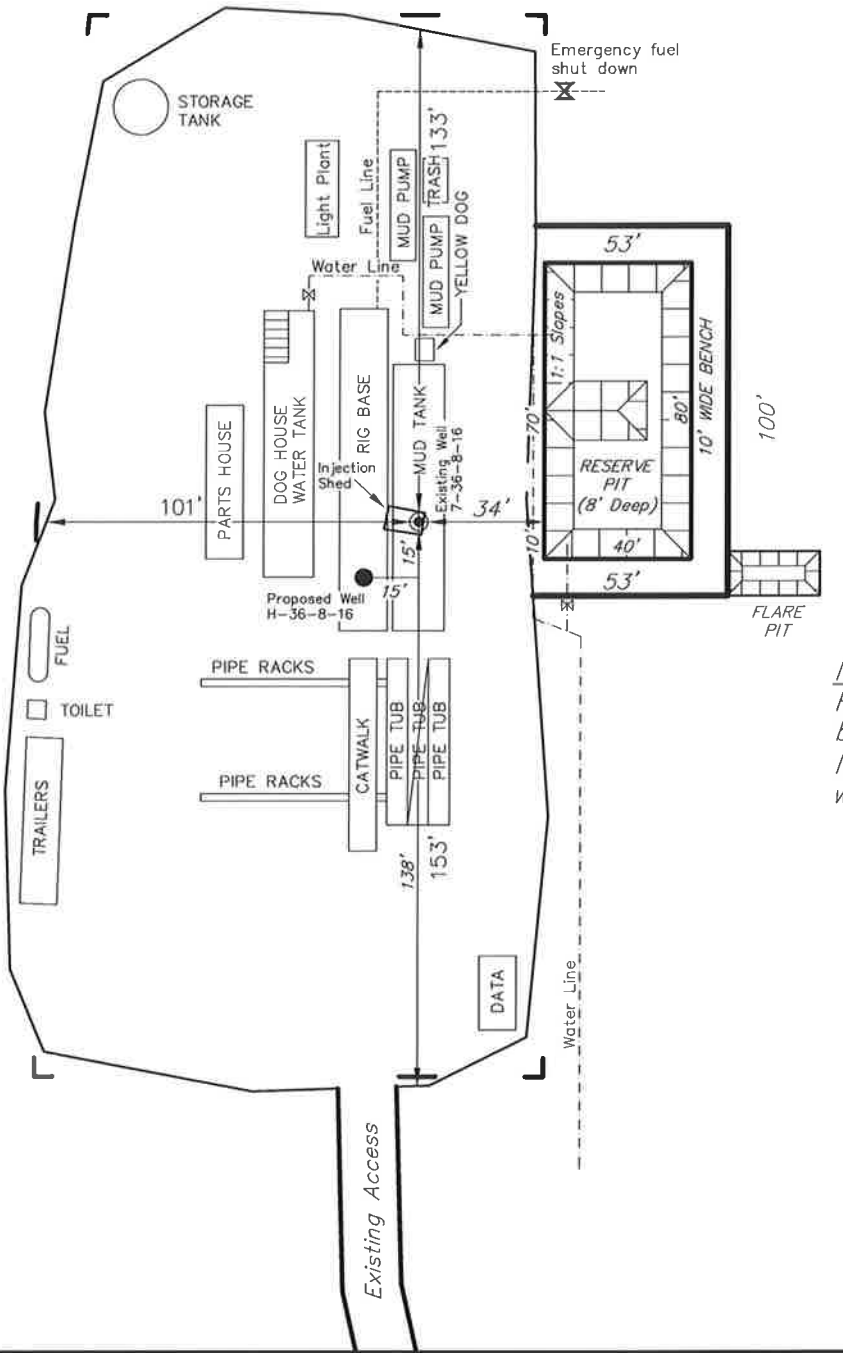
'APIWellNo:43013501110000'

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

### MONUMENT BUTTE EAST H-36-8-16 (Proposed Well)
### MONUMENT BUTTE EAST 7-36-8-16 (Existing Well)




Note:
Flare pit is to be located at least 80' from well head.

| | | | |
|---|---|---|---|
| SURVEYED BY: T.H. | DATE SURVEYED: 06-17-09 | Tri State Land Surveying, Inc. | (435) 781-2501 |
| DRAWN BY: F.T.M. | DATE DRAWN: 06-25-09 | 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 | |
| SCALE: 1" = 50' | REVISED: | | |

'APIWellNo:43013501110000'

# Newfield Production Company
# Proposed Site Facility Diagram

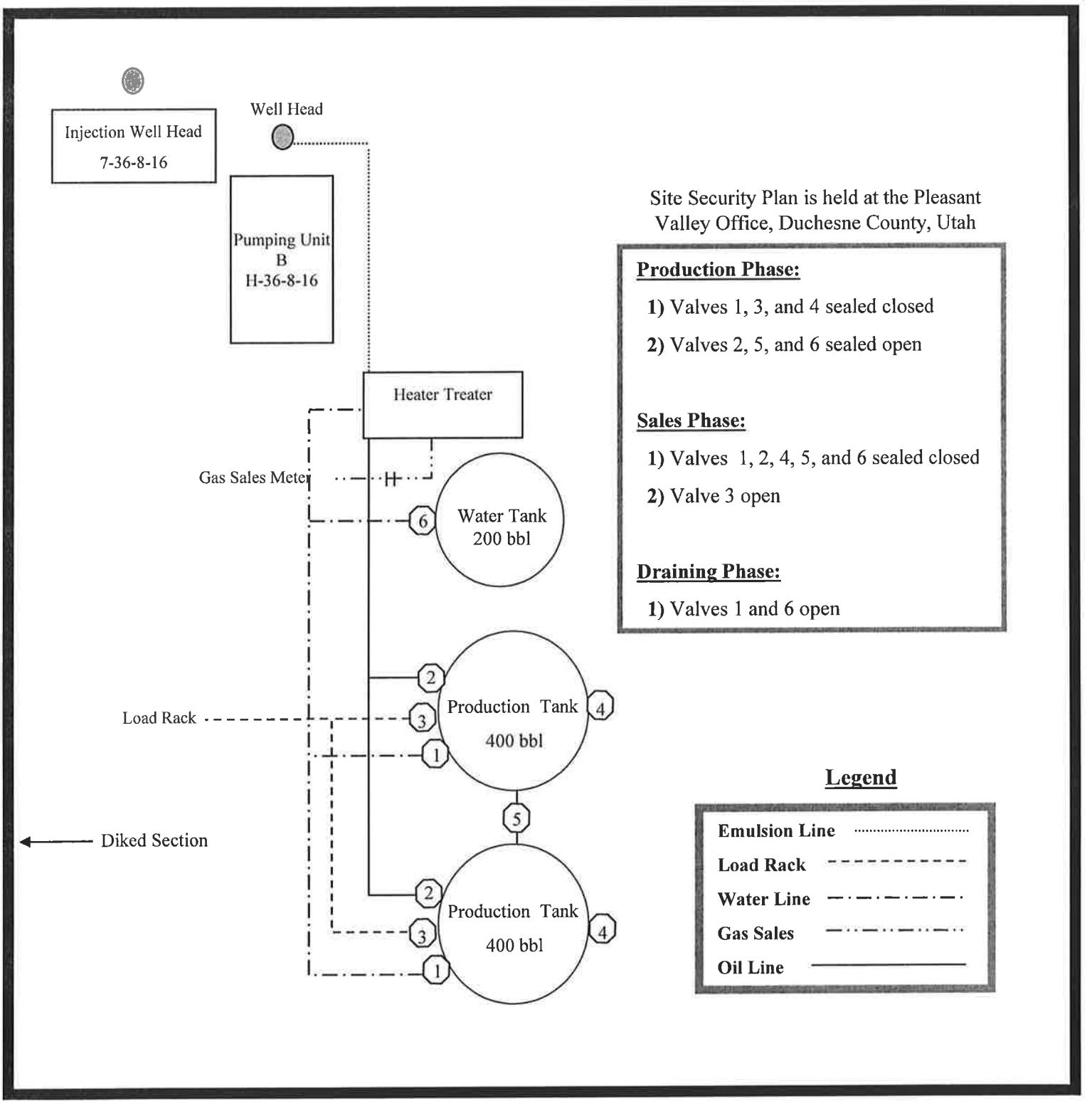
**Monument Butte East State H-36-8-16**

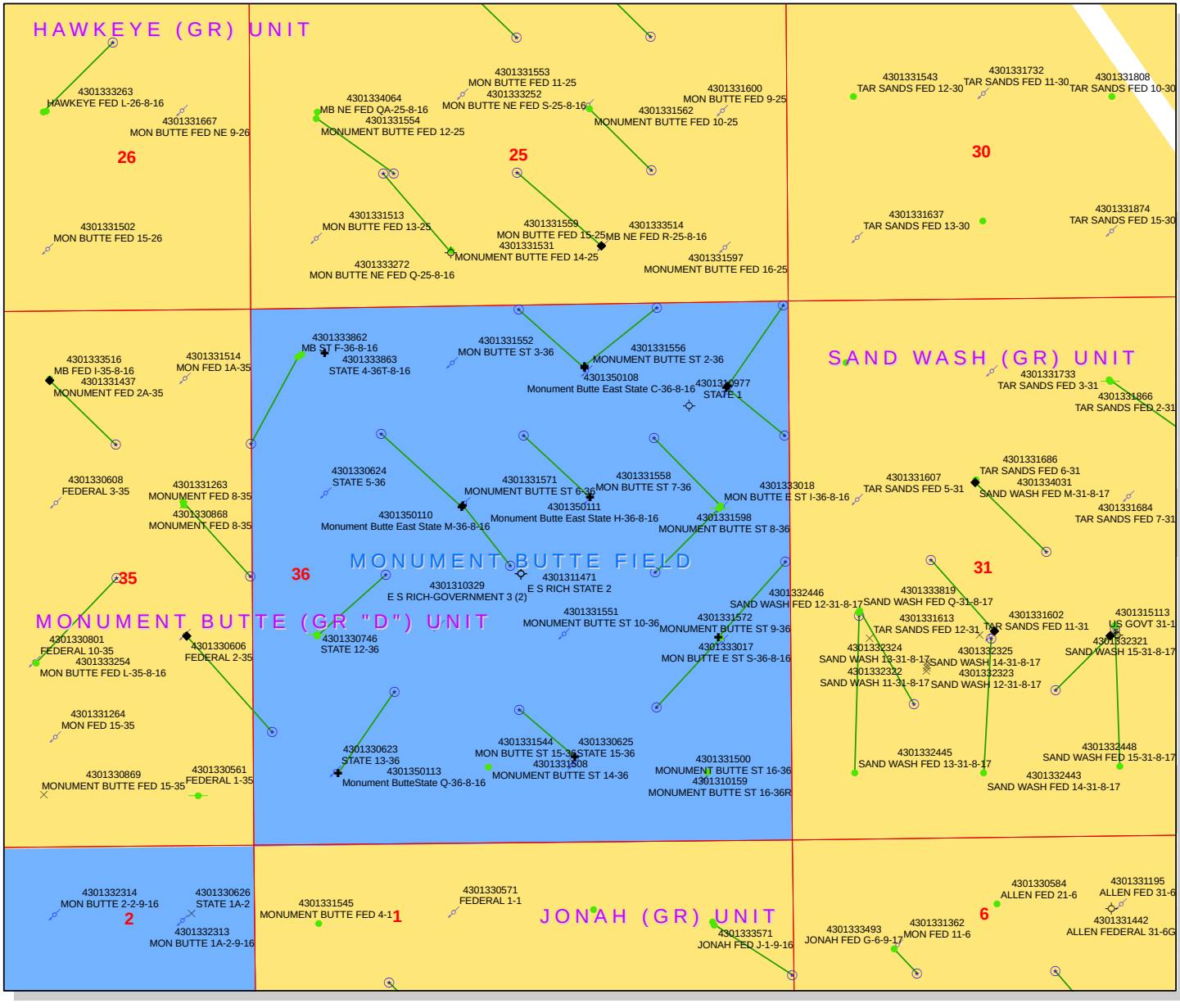
**From the Monument Butte State 7-36-8-16 Location**

**SW/NE Sec. 36 T8S, R16E**

**Duchesne County, Utah**

**ML-22061**






**API Number: 4301350111**

**Well Name: Monument Butte East State H-36-8-16**

**Township 08.0 S Range 16.0 E Section 36**

**Meridian: SLBM**

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:
Map Produced by Diana Mason

**Units**
STATUS
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED

**Fields**
STATUS
ACTIVE
COMBINED
Sections

**Wells Query Events**
<all other values>
GIS_STAT_TYPE
<Null>
APD
DRL
GI
GS
LA
NEW
OPS
PA
PGW
POW
RET
SGW
SOW
TA
TW
WD
WI
WS


1,200 600 0 1,200 Feet

1:12,000

'APIWellNo:43013501110000'

**From:** Jim Davis
**To:** Bonner, Ed; Mason, Diana
**Date:** 8/31/2009 9:01 AM
**Subject:** SITLA well approvals (Newfield 16)

**CC:** Garrison, LaVonne

The following wells have been approved by SITLA including arch and paleo clearance.

Monument Butte East State A-36-8-16 [API #4301350105],

Monument Butte East State J-36-8-16 [API #4301350106],

Monument Butte East State B-36-8-16 [API #4301350107],

Monument Butte East State C-36-8-16 [API #4301350108],

Monument Butte East State G-36-8-16 [API #4301350109],

Monument Butte East State M-36-8-16 [API #4301350110],

Monument Butte East State H-36-8-16 [API #4301350111],

Monument Butte State Q-36-8-16 [API #4301350113],

Monument Butte East State R-36-8-16 [API #4301350114],

Monument Butte State G-2-9-16 [API #4301350115],

South Monument Butte State M-2-9-16 [API #4301350116],

South Monument Butte State N-2-9-16 [API #4301350117],

South Monument Butte State P-2-9-16 [API #4301350118],

South Monument Butte State X-2-9-16 [API #4301350119],

South Monument Butte State V-2-9-16 [API #4301350120],

South Monument Butte State W-2-9-16 [API #4301350121]

These wells are still waiting for approvals of one kind or another:

Monument Butte East Federal V-35-8-16, Host well 2-2-9-16, no new disturbance (State surface, Federal mineral)
Monument Butte East Federal W-35-8-16, Host well 2-2-9-16, no new disturbance (State surface, Federal mineral)
Monument Butte East State K-36-8-16 [API #4301350112], Host well 9-36-8-16, new disturbance

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

**BOPE REVIEW NEWFIELD PRODUCTION COMPANY utte East State H-36-8-16 43013501110000**

| Well Name | NEWFIELD PRODUCTION COMPANY Monument Butte East State H-36-8- | | | |
|---|---|---|---|---|
| String | Surf | Prod | | |
| Casing Size(") | 8.625 | 5.500 | | |
| Setting Depth (TVD) | 400 | 6435 | | |
| Previous Shoe Setting Depth (TVD) | 0 | 400 | | |
| Max Mud Weight (ppg) | 8.3 | 8.6 | | |
| BOPE Proposed (psi) | 0 | 2000 | | |
| Casing Internal Yield (psi) | 2950 | 4810 | | |
| Operators Max Anticipated Pressure (psi) | 2786 | 8.3 | | |

| Calculations | Surf String | 8.625 | " |
|---|---|---|---|
| Max BHP (psi) | .052*Setting Depth*MW= | 173 | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | 125 | NO |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | 85 | NO |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 85 | NO OK |
| Required Casing/BOPE Test Pressure= | | 400 | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | 0 | psi *Assumes 1psi/ft frac gradient |

| Calculations | Prod String | 5.500 | " |
|---|---|---|---|
| Max BPH (psi) | .052*Setting Depth*MW= | 2878 | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | 2106 | NO |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | 1462 | YES OK |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 1550 | NO Reasonable for area |
| Required Casing/BOPE Test Pressure= | | 2000 | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | 400 | psi *Assumes 1psi/ft frac gradient |

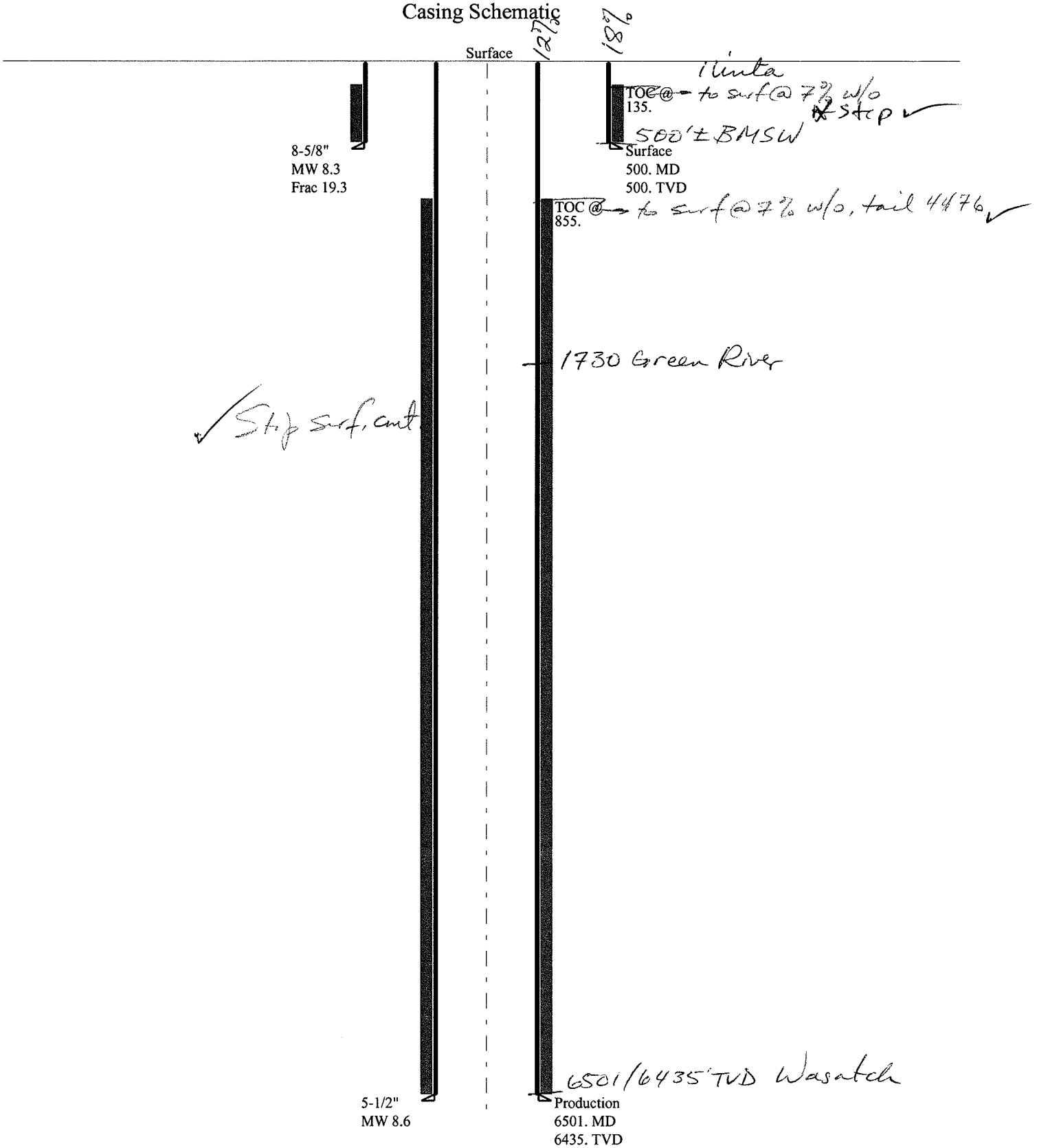
| Calculations | String | | " |
|---|---|---|---|
| Max BHP (psi) | .052*Setting Depth*MW= | | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | | NO |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | | NO |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | | NO |
| Required Casing/BOPE Test Pressure= | | | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | | psi *Assumes 1psi/ft frac gradient |

| Calculations | String | | " |
|---|---|---|---|
| Max BHP (psi) | .052*Setting Depth*MW= | | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | | NO |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | | NO |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | | NO |
| Required Casing/BOPE Test Pressure= | | | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | | psi *Assumes 1psi/ft frac gradient |

'APIWellNo:43013501110000'

# 43013501110000 Monument Butte East State H-36-8-16

## Casing Schematic



'APIWellNo:43013501110000'

| | |
|---|---|
| Well name: | **43013501110000 Monument Butte East State H-36-8-16** |
| Operator: | **NEWFIELD PRODUCTION COMPANY** |
| String type: | Surface |
| Project ID: | 43-013-50111 |
| Location: | DUCHESNE COUNTY |

**Design parameters:**

**Collapse**
Mud weight: 8.330 ppg
Design is based on evacuated pipe.

**Burst**
Max anticipated surface pressure: 440 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 500 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**
Design factor 1.125

**Burst:**
Design factor 1.00

**Tension:**
8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 437 ft

**Environment:**
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 81 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 135 ft

**Non-directional string.**

**Re subsequent strings:**
Next setting depth: 6,435 ft
Next mud weight: 8.600 ppg
Next setting BHP: 2,875 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 500 ft
Injection pressure: 500 psi

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Est. Cost ($) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 500 | 8.625 | 24.00 | J-55 | ST&C | 500 | 500 | 7.972 | 2573 |

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (kips) | Tension Strength (kips) | Tension Design Factor |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 216 | 1370 | 6.333 | 500 | 2950 | 5.90 | 12 | 244 | 20.34 J |

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: September 3,2009
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 500 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

'APIWellNo:43013501110000'

| | |
|---|---|
| Well name: | **43013501110000 Monument Butte East State H-36-8-16** |
| Operator: | **NEWFIELD PRODUCTION COMPANY** |
| String type: | Production |
| Project ID: | 43-013-50111 |
| Location: | DUCHESNE COUNTY |

**Design parameters:**

**Collapse**
Mud weight: 8.600 ppg
Design is based on evacuated pipe.

**Burst**
Max anticipated surface pressure: 1,459 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 2,875 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**
Design factor 1.125

**Burst:**
Design factor 1.00

**Tension:**
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 5,653 ft

**Environment:**
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 164 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 855 ft

**Directional Info - Build & Hold**
Kick-off point 600 ft
Departure at shoe: 863 ft
Maximum dogleg: 1.5 °/100ft
Inclination at shoe: 8.85 °

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Est. Cost ($) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6501 | 5.5 | 15.50 | J-55 | LT&C | 6435 | 6501 | 4.825 | 22954 |

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (kips) | Tension Strength (kips) | Tension Design Factor |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2875 | 4040 | 1.405 | 2875 | 4810 | 1.67 | 99.7 | 217 | 2.18 J |

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: September 3,2009
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 6435 ft, a mud weight of 8.6 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

*Engineering responsibility for use of this design will be that of the purchaser.*

'APIWellNo:43013501110000'

NEWFIELD
ROCKY MOUNTAINS

December 2, 2009

State of Utah, Division of Oil, Gas and Mining
ATTN: Diana Mason
P.O. Box 145801
Salt Lake City, UT 84114-5801

1904

RE: Directional Drilling
**Monument Butte East State H-36-8-16**
Greater Monument Butte (Green River) Unit
ML-22061
Surface Hole: T8S-R16E Section 36: SWNE
1896' FNL 1955' FEL

At Target: T8S-R16E Section 36: NWNE
1280' FNL 2597' FEL

Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 8/17/09, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield Certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing pre-exiting roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4197 or by email at sgillespie@newfield.com. Your consideration in this matter is greatly appreciated.

Sincerely,
Newfield Production Company

Shane Gillespie
Land Associate

RECEIVED
DEC 07 2009
DIV. OF OIL, GAS & MINING

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

**Utah State Office**
**P.O. Box 45155**
**Salt Lake City, Utah 84145-0155**

**IN REPLY REFER TO:**
**3160**
**(UT-922)**

December 11, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2009 Plan of Development Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2009 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

| API # | WELL NAME | LOCATION |
|---|---|---|
| (Proposed PZ GREEN RIVER) | | |
| 43-013-50112 | MB East State | K-36-8-16 Sec 36 T08S R16E 2004 FSL 0706 FEL<br>BHL Sec 36 T08S R16E 2560 FNL 0040 FEL |
| 43-013-50111 | MB East State | H-36-8-16 Sec 36 T08S R16E 1896 FNL 1955 FEL<br>BHL Sec 36 T08S R16E 1280 FNL 2597 FEL |
| 43-013-50110 | MB East State | M-36-8-16 Sec 36 T08S R16E 1956 FNL 2075 FWL<br>BHL Sec 36 T08S R16E 2560 FNL 2536 FWL |
| 43-013-50109 | MB East State | G-36-8-16 Sec 36 T08S R16E 1972 FNL 2061 FWL<br>BHL Sec 36 T08S R16E 1242 FNL 1280 FWL |
| 43-013-50108 | MB East State | C-36-8-16 Sec 36 T08S R16E 0624 FNL 1996 FEL<br>BHL Sec 36 T08S R16E 0040 FNL 2635 FEL |
| 43-013-50107 | MB East State | B-36-8-16 Sec 36 T08S R16E 0603 FNL 1995 FEL<br>BHL Sec 36 T08S R16E 0040 FNL 1280 FEL |
| 43-013-50106 | MB East State | J-36-8-16 Sec 36 T08S R16E 0839 FNL 0604 FEL<br>BHL Sec 36 T08S R16E 1317 FNL 0040 FEL |
| 43-013-50105 | MB East State | A-36-8-16 Sec 36 T08S R16E 0822 FNL 0591 FEL<br>BHL Sec 36 T08S R16E 0040 FNL 0040 FEL |

| API # | WELL NAME | LOCATION |
|---|---|---|
| (Proposed PZ GREEN RIVER) | | |
| 43-013-50114 | MB East State | R-36-8-16 Sec 36 T08S R16E 0842 FSL 2124 FEL<br>BHL Sec 36 T08S R16E 1317 FSL 2612 FWL |
| 43-013-50149 | Federal | 14-29-8-16 Sec 29 T08S R16E 0679 FSL 2241 FWL |
| 43-047-50490 | Federal | 6-31-8-19 Sec 31 T08S R19E 0473 FNL 1813 FWL |
| 43-013-50061 | Federal | 3-27-8-16 Sec 27 T08S R16E 0748 FNL 2211 FWL |
| 43-047-40594 | Federal | 10-20-8-18 Sec 20 T08S R18E 2138 FSL 3060 FWL |

Our records indicate the Federal 10-20-8-18 is closer than 460 feet from the Greater Monument Butte Unit boundary.

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File – Greater Monument Butte Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:12-11-09

# ON-SITE PREDRILL EVALUATION
## Utah Division of Oil, Gas and Mining

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Operator** | NEWFIELD PRODUCTION COMPANY | | | | | | | | |
| **Well Name** | Monument Butte East State H-36-8-16 | | | | | | | | |
| **API Number** | 43013501110000 | **APD No** | 1904 | **Field/Unit** | MONUMENT BUTTE | | | | |
| **Location: 1/4,1/4** | SWNE | **Sec** | 36 | **Tw** | 8.0S | **Rng** | 16.0E | 1896 FNL | 1955 FEL |
| **GPS Coord (UTM)** | 579758 4436459 | **Surface Owner** | | | | | | | |

**Participants**

Floyd Bartlett (DOGM), Tim Eaton (Newfield).

**Regional/Local Setting & Topography**

The proposed Monument Butte East State H-36-8-16 proposed oil well is to be directionally drilled from the existing pad of the Monument Butte East State 7-36-8-16 water flood injection well. No changes are planned to the existing pad. The reserve pit will be re-dug near the original location in the southeast side of the pad. The wells are on 20-acre spacing.

A field review of the site and the existing pad showed no concerns and should be suitable for drilling and operating the proposed additional well.

SITLA owns both the surface and the minerals. T

**Surface Use Plan**

**Current Surface Use**
Existing Well Pad

| **New Road Miles** | **Well Pad** | | **Src Const Material** | **Surface Formation** |
|---|---|---|---|---|
| 0 | **Width** | **Length** | | |

**Ancillary Facilities**

**Waste Management Plan Adequate?**

**Environmental Parameters**

**Affected Floodplains and/or Wetlands**

**Flora / Fauna**
Existing Well Pad

**Soil Type and Characteristics**

**Erosion Issues**

**Sedimentation Issues**

**Site Stability Issues**

**Drainage Diverson Required?**

**Berm Required?**

**Erosion Sedimentation Control Required?**

| Paleo Survey Run? | Paleo Potental Observed? | Cultural Survey Run? | Cultural Resources? |
|---|---|---|---|

**Reserve Pit**

| Site-Specific Factors | | Site Ranking | |
|---|---|---|---|
| **Distance to Groundwater (feet)** | 100 to 200 | 5 | |
| **Distance to Surface Water (feet)** | >1000 | 0 | |
| **Dist. Nearest Municipal Well (ft)** | >5280 | 0 | |
| **Distance to Other Wells (feet)** | | 20 | |
| **Native Soil Type** | Mod permeability | 10 | |
| **Fluid Type** | Fresh Water | 5 | |
| **Drill Cuttings** | Normal Rock | 0 | |
| **Annual Precipitation (inches)** | | 0 | |
| **Affected Populations** | | | |
| **Presence Nearby Utility Conduits** | Not Present | 0 | |
| | **Final Score** | 40 | 1 Sensitivity Level |

**Characteristics / Requirements**

A reserve pit will be re-dug near the original location. Its dimensions are 80' x 40' x 8' deep. A 10-foot wide bench is provided around the outside. A 16-mil liner with an appropriate sub-liner is required.

**Closed Loop Mud Required?** N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** Y

**Other Observations / Comments**

| Floyd Bartlett | 8/24/2009 |
|---|---|
| **Evaluator** | **Date / Time** |

# Application for Permit to Drill
# Statement of Basis



| APD No | API WellNo | Status | Well Type | Surf Owner | CBM |
|---|---|---|---|---|---|
| 1904 | 43013501110000 | LOCKED | OW | S | No |
| **Operator** | NEWFIELD PRODUCTION COMPANY | | **Surface Owner-APD** | | |
| **Well Name** | Monument Butte East State H-36-8-16 | | **Unit** | GMBU (GRRV) | |
| **Field** | MONUMENT BUTTE | | **Type of Work** | DRILL | |
| **Location** | SWNE 36 8S 16E S 1896 FNL 1955 FEL | | GPS Coord (UTM) | 579760E | 4436452N |

**Geologic Statement of Basis**

Newfield proposes to set 300' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 500'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 36. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Surface casing should be extended to cover the base of the moderately saline ground water.

| Brad Hill | 9/1/2009 |
|---|---|
| **APD Evaluator** | **Date / Time** |

**Surface Statement of Basis**

The proposed Monument Butte East State H-36-8-16 proposed oil well is to be directionally drilled from the existing pad of the Monument Butte East State 7-36-8-16 water flood injection well. No changes are planned to the existing pad. The reserve pit will be re-dug near the original location in the southeast side of the pad. The wells are on 20-acre spacing.

A field review of the site and the existing pad showed no concerns and should be suitable for drilling and operating the proposed additional well.

SITLA owns both the surface and the minerals. They were invited to the pre-site visit but did not attend.

The Utah Division of Wildlife Resources was also invited and did not attend.

| Floyd Bartlett | 8/24/2009 |
|---|---|
| **Onsite Evaluator** | **Date / Time** |

**Conditions of Approval / Application for Permit to Drill**

| Category | Condition |
|---|---|
| Pits | A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit. |
| Surface | The well site shall be bermed to prevent fluids from leaving the pad. |
| Surface | The reserve pit shall be fenced upon completion of drilling operations. |

# WORKSHEET
# APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 8/17/2009 **API NO. ASSIGNED:** 43013501110000

**WELL NAME:** Monument Butte East State H-36-8-16

**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 646-4825

**CONTACT:** Mandie Crozier

**PROPOSED LOCATION:** SWNE 36 080S 160E **Permit Tech Review:** ☑

**SURFACE:** 1896 FNL 1955 FEL **Engineering Review:** ☑

**BOTTOM:** 1280 FNL 2597 FEL **Geology Review:** ☑

**COUNTY:** DUCHESNE

**LATITUDE:** 40.07645 **LONGITUDE:** -110.06459

**UTM SURF EASTINGS:** 579760.00 **NORTHINGS:** 4436452.00

**FIELD NAME:** MONUMENT BUTTE

**LEASE TYPE:** 3 - State

**LEASE NUMBER:** ML-22061 **PROPOSED PRODUCING FORMATION(S):** GREEN RIVER

**SURFACE OWNER:** 3 - State **COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

- ☑ **PLAT**
- ☑ **Bond:** STATE/FEE - B001834
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** 43-7478
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

**Commingling Approved**

**LOCATION AND SITING:**

- ☐ **R649-2-3.**

**Unit:** GMBU (GRRV)

- ☐ **R649-3-2. General**
- ☑ **R649-3-3. Exception**
- ☑ **Drilling Unit**

**Board Cause No:** Cause 213-11

**Effective Date:** 11/30/2009

**Siting:** 460' fr unit boundary

- ☑ **R649-3-11. Directional Drill**

**Comments:** Presite Completed

**Stipulations:**
1 - Exception Location - dmason
5 - Statement of Basis - bhill
15 - Directional - dmason
25 - Surface Casing - hmacdonald
27 - Other - bhill

GARY R. HERBERT
*Governor*
GREGORY S. BELL
*Lieutenant Governor*

**State of Utah**
**DEPARTMENT OF NATURAL RESOURCES**
MICHAEL R. STYLER
*Executive Director*
**Division of Oil, Gas and Mining**
JOHN R. BAZA
*Division Director*

# Permit To Drill

**********

**Well Name:** Monument Butte East State H-36-8-16
**API Well Number:** 43013501110000
**Lease Number:** ML-22061
**Surface Owner:** STATE
**Approval Date:** 12/14/2009

**Issued to:**
NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

**Authority:**
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**Exception Location:**
Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

**General:**
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**
In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

**Additional Approvals:**

API Well No: 43013501110000

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

For Gil Hunt
Associate Director, Oil & Gas

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
ENTITY ACTION FORM -FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY
ADDRESS: RT. 3 BOX 3630
MYTON, UT 84052

OPERATOR ACCT. NO. N2695

| ACTION CODE | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 99999 | 17400 ✓ | 4301350111 | MON BUTTE EAST ST H-36-8-16 | SWNE | 36 | 8S | 16E | DUCHESNE | 5/21/2010 | 6/7/10 |

WELL 1 COMMENTS:
GRRV BHL = NWNE

| ACTION CODE | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 99999 | 17627 | 4304739334 | UTE TRIBAL 16-29-4-1E | SESE | 29 | 4S | 1E | UINTAH | 5/17/2010 | 6/7/10 |

GRRV

| ACTION CODE | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 99999 | 17400 ✓ | 43047 40534 ~~4304740411~~ | CASTLE DRAW ST N-2-9-17 | NENW | 2 | 9S | 17E | Surface UINTAH | 5/19/2010 | 6/7/10 |

GRRV BHL = SENW Duchesne Co Sec 2 T9S R17E

| ACTION CODE | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 99999 | 17628 | 4304739333 | UTE TRIBAL 12-~~26~~ 29-4-1E | NWSW | ~~26~~ 29 | 4S | 1E | UINTAH | 5/20/2010 | 6/7/10 |

GRRV

| ACTION CODE | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 99999 | 17629 | 4304750947 | HANCOCK 5-23-4-1 | SWNW | 23 | 4S | 1W ~~1E~~ | UINTAH | 5/19/2010 | 6/7/10 |

WELL 5 COMMENTS:
GRRV

| ACTION CODE | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 99999 | 17400 ✓ | 4301334071 | FED BLACKJACK N-33-8-17 | NWSW | 33 | 8S | 17E | Duchesne ~~UINTAH~~ | 5/7/2010 | 6/7/10 |

WELL 5 COMMENTS:
GRRV BHL = NWSW

ACTION CODES (See instructions on back of form)
A - new entity for new well (single well only)
B - well to existing entity (group or unit well)
C - from one existing entity to another existing entity
D - well from one existing entity to a new entity
E - other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

RECEIVED
MAY 20 2010
DIV. OF OIL, GAS & MINING

Jentri Park
Signature
Production Clerk
05/20/10
Date

Spud

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross #21
Submitted By Mitch Benson Phone Number (435) 823-5885
Name/Numer Monument Butte East State H-36-8-16
Qtr/Qrt SW/NE Section 36 Township 8S Range 16E
Lease Serial Number ML-22061
API Number 43-013-50111

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 5/21/2010 9:00:00 AM

Casing – Please report time casing run starts, not cementing times.

X Surface Casing
Intermediate
Production Casing
Liner
Other

Date/Time 5/21/2010 4:00:00 PM

Remarks:

# STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

| 5. LEASE DESIGNATION AND SERIAL NUMBER: |
|---|
| UTAH STATE ML-22061 |
| 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| |
| 7. UNIT or CA AGREEMENT NAME: |
| GMBU |
| 8. WELL NAME and NUMBER: |
| MON BUTTE EAST H-36-8-16 |
| 9. API NUMBER: |
| 4301350111 |
| 10. FIELD AND POOL, OR WILDCAT: |
| GREATER MB UNIT |

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL [x] GAS WELL [ ] OTHER

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

4. LOCATION OF WELL:
FOOTAGES AT SURFACE: 1896 FNL 1955 FEL COUNTY: DUCHESNE
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: , 36, T8S, R16E STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|---|
| [ ] NOTICE OF INTENT (Submit in Duplicate) | [ ] ACIDIZE | [ ] DEEPEN | [ ] REPERFORATE CURRENT FORMATION |
| Approximate date work will | [ ] ALTER CASING | [ ] FRACTURE TREAT | [ ] SIDETRACK TO REPAIR WELL |
| | [ ] CASING REPAIR | [ ] NEW CONSTRUCTION | [ ] TEMPORARILY ABANDON |
| | [ ] CHANGE TO PREVIOUS PLANS | [ ] OPERATOR CHANGE | [ ] TUBING REPAIR |
| | [ ] CHANGE TUBING | [ ] PLUG AND ABANDON | [ ] VENT OR FLAIR |
| [x] SUBSEQUENT REPORT (Submit Original Form Only) | [ ] CHANGE WELL NAME | [ ] PLUG BACK | [ ] WATER DISPOSAL |
| Date of Work Completion: | [ ] CHANGE WELL STATUS | [ ] PRODUCTION (START/STOP) | [ ] WATER SHUT-OFF |
| 05/30/2010 | [ ] COMMINGLE PRODUCING FORMATIONS | [ ] RECLAMATION OF WELL SITE | [x] OTHER: - Spud Notice |
| | [ ] CONVERT WELL TYPE | [ ] RECOMPLETE - DIFFERENT FORMATION | |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 5/21/10 MIRU Ross rig # 21.Spud well @ 9:00 PM. Drill 545' of 12 1/4" hole with air mist. TIH W/ 12 Jt's 8 5/8" J-55 24 # csgn. Set @ 543.88 KB On 5/25/10 cement with 250 sks of class "G" w/ 12% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 6 bbls cement to pit. WOC.

NAME (PLEASE PRINT) Alvin Nielsen TITLE Drilling Foreman

SIGNATURE Alvin Nielsen DATE 05/30/2010

(This space for State use only)

RECEIVED
JUN 07 2010
DIV. OF OIL, GAS & MINING

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

**8 5/8"** CASING SET AT **543.88**

LAST CASING **14** SET AT **5**
DATUM **13**
DATUM TO CUT OFF CASING **13**
DATUM TO BRADENHEAD FLANGE **13**
TD DRILLER **545** LOGGER
HOLE SIZE **12 1/4"**

OPERATOR **Newfield Exploration Company**
WELL **MON BUTTE EAST H-36-8-16**
FIELD/PROSPECT **Mon. Butte**
CONTRACTOR & RIG # **Ross Rig # 21**

LOG OF CASING STRING:

| PIECES | OD | ITEM - MAKE - DESCRIPTION | WT / FT | GRD | THREAD | CONDT | LENGTH |
|---|---|---|---|---|---|---|---|
| 1 | | Well Head | | | | | 0.95 |
| 1 | | Float Collar | | | | | 0.9 |
| 1 | 8 5/8" | Shoe Joint | 24 | J-55 | STC | A | 43.27 |
| 11 | 8 5/8" | Surface Casing | 24 | J-55 | STC | A | 488.76 |
| | | | | | | | |
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| CASING INVENTORY BAL. | FEET | JTS |
|---|---|---|
| TOTAL LENGTH OF STRING | 533.88 | 12 |
| LESS NON CSG. ITEMS | 1.85 | |
| PLUS FULL JTS. LEFT OUT | 0 | |
| TOTAL | 532.03 | 12 |
| TOTAL CSG. DEL. (W/O THRDS) | 532.03 | 12 |
| TIMING | | |
| BEGIN RUN CSG. Spud | 9:00 AM | 5/21/2010 |
| CSG. IN HOLE | 5:00 PM | 5/21/2010 |
| BEGIN CIRC | 9:01 AM | 5/25/2010 |
| BEGIN PUMP CMT | 9:13 AM | 5/25/2010 |
| BEGIN DSPL. CMT | 9:30 AM | 5/25/2010 |
| PLUG DOWN | **9:39 AM** | **5/25/2010** |

| | |
|---|---|
| TOTAL LENGTH OF STRING | 533.88 |
| LESS CUT OFF PIECE | 2 |
| PLUS DATUM TO T/CUT OFF CSG | 12 |
| CASING SET DEPTH | **543.88** |

} COMPARE

GOOD CIRC THRU JOB Yes
Bbls CMT CIRC TO SURFACE 6
RECIPROCATED PIPI No

BUMPED PLUG TO 240

| CEMENT USED | | CEMENT COMPANY- **BJ Services** |
|---|---|---|
| STAGE | # SX | CEMENT TYPE & ADDITIVES |
| 1 | 250 | Class "G"+2%CaCl+.25#sk Cello Flake Mixed @ 15.8ppg W/ 1.17 Yield |
| | | Returned 6bbls Cement to pit |
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| CENTRALIZER & SCRATCHER PLACEMENT | | SHOW MAKE & SPACING |
| Middle of First top of second and third for a total of three | | |

COMPANY REPRESENTATIVE **Ryan Crum** DATE **5/2/2010**

# STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

| 5. LEASE DESIGNATION AND SERIAL NUMBER: UTAH STATE ML-22061 |
|---|
| 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| 7. UNIT or CA AGREEMENT NAME: GMBU |
| 8. WELL NAME and NUMBER: MON BUTTE EAST H-36-8-16 |
| 9. API NUMBER: 4301350111 |
| 10. FIELD AND POOL, OR WILDCAT: GREATER MB UNIT |

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

4. LOCATION OF WELL:
FOOTAGES AT SURFACE: COUNTY: DUCHESNE
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: , 36, T8S, R16E STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|---|
| ☐ NOTICE OF INTENT (Submit in Duplicate) | ☐ ACIDIZE | ☐ DEEPEN | ☐ REPERFORATE CURRENT FORMATION |
| Approximate date work will | ☐ ALTER CASING | ☐ FRACTURE TREAT | ☐ SIDETRACK TO REPAIR WELL |
| | ☐ CASING REPAIR | ☐ NEW CONSTRUCTION | ☐ TEMPORARITLY ABANDON |
| | ☐ CHANGE TO PREVIOUS PLANS | ☐ OPERATOR CHANGE | ☐ TUBING REPAIR |
| | ☐ CHANGE TUBING | ☐ PLUG AND ABANDON | ☐ VENT OR FLAIR |
| ☒ SUBSEQUENT REPORT (Submit Original Form Only) | ☐ CHANGE WELL NAME | ☐ PLUG BACK | ☐ WATER DISPOSAL |
| Date of Work Completion: | ☐ CHANGE WELL STATUS | ☐ PRODUCTION (START/STOP) | ☐ WATER SHUT-OFF |
| 06/25/2010 | ☐ COMMINGLE PRODUCING FORMATIONS | ☐ RECLAMATION OF WELL SITE | ☒ OTHER: - Weekly Status Report |
| | ☐ CONVERT WELL TYPE | ☐ RECOMPLETE - DIFFERENT FORMATION | |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above subject well was completed on 06-25-10, attached is a daily completion status report.

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Administrative Assistant

SIGNATURE [signature] DATE 06/25/2010

(This space for State use only)

RECEIVED
JUN 29 2010
DIV. OF OIL, GAS & MINING

# Daily Activity Report

### Format For Sundry

## MON BUTTE EAST H-36-8-16

### 4/1/2010 To 8/30/2010

**6/10/2010 Day: 1** **Completion**

Rigless on 6/10/2010 - Run CBL & perforate 1st stage - Install 5m frac head. NU 6" 5K Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head, csg & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 6448' & cement top @ 52'. Perforate stage #1, LODC sds @ (5752'-57') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen) w/ 3 spf for total of 12 shots. LODC sds @ (5731'-34') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen) w/ 3 spf for total of 9 shots. LODC sds @ (5709'-11') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen) w/ 3 spf for total of 6 shots. LODC sds @ (5691'-93') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen) w/ 3 spf for total of 6 shots. A3 sds @ (5659'-61') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen) w/ 3 spf for total of 6 shots. RD H/O truck & The Perforators WLT & mast. Wait on frac crew
**Daily Cost:** $0
**Cumulative Cost:** $12,903

---

**6/19/2010 Day: 2** **Completion**

Rigless on 6/19/2010 - MIRU Perforators LLC & Bj Services. Perforate & frac 3 stage. Flowback well. - MIRU Perforators LLC & Bj Services. Perforate & frac 3 stage. Screened out last stage. 20.6 bbls short of flush. 35,444#'s in formation, Left 6,360#'s in casing. Flowback well for 3 hrs. Turned to oil. SIWFN w/ 1705 BWTR.
**Daily Cost:** $0
**Cumulative Cost:** $104,063

---

**6/21/2010 Day: 3** **Completion**

WWS #3 on 6/21/2010 - MIRU WWS #3. Set kill plug. Talley, PU & RIH w/ 4 3/4" chomp bit & tbg. Tag kill plug. Circulate well clean. SIWFN w/ BWTR. - MIRU WWS #3. Unload tbg. 900 psi on well. Zubiate hot oil pumped 10 BW down csg. RU Perforators WLT. RIH w/ Weatherford 5 1/2" solid composite plug. Set plug @ 5850'. RD WLT. Bleed off pressure. ND Cameron BOP & 5M WH. NU 3M WH & Schaffer BOP. Talley, PU & RIH w/ 4 3/4" chomp bit, bit sub & 2 7/8" J-55 tbg. Tagged kill plug @ 5850'. Circulate well clean. SIWFN w/ 1712 BWTR.
**Daily Cost:** $0
**Cumulative Cost:** $156,122

---

**6/23/2010 Day: 4** **Completion**

WWS #3 on 6/23/2010 - Drill out kill plug @ 2 CFTBP. Clean out to PBTD. Swab. SIWFN w/ 1552 BWTR. - 0 psi on well. Continue PU & RIH w/ tbg. Tag plug @ 4850'. RU Nabors power swivel. Drill out kill plug (25 mins). Circulate well till pressure drop off. Continue PU & RIH w/ tbg. Tag plug @ 5180', (Drilled out in 20 mins). Hang back power swivel. PU & RIH w/ tbg. Tag plug @ 5615'. RU power swivel. Drill out plug (22 mins), Tagged fill @ 6157'. Clean out to PBTD @ 6454'. Circulate well for 3hrs (Heavy sand in returns). RU swab equipment. LD 3 jts of tbg. EOT @ 6360'. Made 8 swab runs. IFL @ surface. Rec 90 BTF. FFL @ 1800'. Moderate sand @ trace of oil. SIWFN w/ 1552 BWTR.
**Daily Cost:** $0

**Cumulative Cost:** $164,112

---

**6/24/2010 Day: 5** **Completion**

WWS #3 on 6/24/2010 - Swab for sand cleanup. Trip & land production tbg. Start running rod string. - 300 psi SICP & 150 psi SITP. Bleed well off (wtr, gas & some oil). Con't swabbing for sand cleanup. Made 12 more runs rec add'l 125 BTF. FFL @ 1500'. Samples are free of sand last 4 runs. Slug tbg W/ 10 bbls wtr. TIH W/ tbg to tag sd @ 6450' (51' of new fill). C/O sd to PBTD @ 6501' & circ hole clean. Lost est 30 BW. LD excess tbg. TOH W/ tbg & LD bit. TIH W/ BHA & production tbg as follows: 2 7/8 NC, 2 jts tbg, SN, 3 jts tbg, new Central Hydraulics 5 1/2" TA (45K) & 181 jts 2 7/8 8rd 6.5# J-55 tbg. ND BOP. Set TA @ 5675' W/ SN @ 5773' & EOT @ 5837'. Land tbg W/ 18,000# tension & NU wellhead. Flush (circulate) tbg W/ 60 BW. PU & TIH W/ new pump and rod string to 3625'. PU polished rod & SIFN W/ est 1457 BWTR.
**Daily Cost:** $0
**Cumulative Cost:** $170,475

---

**6/25/2010 Day: 6** **Completion**

WWS #3 on 6/25/2010 - Finish PU rod string. RDMOSU. Placed well on production @ 11:00 AM 6/24/2010 W/ 144" SL @ 5 SPM. 1457 BWTR. FINAL REPORT!! - SICP @ 400 psi, SITP @ 300 psi. Bleed well off & LD polished rod. Con't PU & TIH W/ new pump and rod string f/ 3625' (complete as follows): Central Hydraulics 2 1/2" X 1 3/4" X 24' RHAC pump, 4-1 1/2" weight rods, 225-7/8" scrapered rods (8 per), 1-4' & 1-2' X 7/8" pony rods and 1 1/2" X 30' polished rod. Seat pump & RU pumping unit. W/ tbg full, pressure test tbg & pump to 200 psi. Stroke pump up W/ unit to 800 psi. Good pump action. RDMOSU. Est 1457 BWTR. Place well on production @ 11:00 AM 6/24/2010 W/ 144" SL @ 5 SPM¿¿¿¿.FINAL REPORT!!.....
**Finalized**
**Daily Cost:** $0
**Cumulative Cost:** $212,210

---

**Pertinent Files: Go to File List**

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

# WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.: ML-22061

1a. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☑ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other: _____

6. If Indian, Allottee or Tribe Name:

7. Unit or CA Agreement Name and No.: GMBU

2. Name of Operator: NEWFIELD EXPLORATION COMPANY

8. Lease Name and Well No.: MONUMENT BUTTE EAST H-36-8-16

3. Address: 1401 17TH ST. SUITE 1000 DENVER, CO 80202

3a. Phone No. *(include area code)*: (435)646-3721

9. AFI Well No.: 43-013-50111

4. Location of Well *(Report location clearly and in accordance with Federal requirements)** BHL reviewed by HSM

10. Field and Pool or Exploratory: MONUMENT BUTTE

At surface 1896' FNL & 1955' FEL (SW/NE) SEC. 36, T8S, R16E (ML-22061)

11. Sec., T., R., M., on Block and Survey or Area: SEC. 36, T8S, R16E

At top prod. interval reported below 1336' FNL & 2570' FEL (SW/NE) SEC. 36, T8S, R16E (ML-22061)

12. County or Parish: DUCHESNE

13. State: UT

At total depth 1154' FNL & 2484' FWL (NE/NW) SEC. 36, T8S, R16E (ML-22061)

| 14. Date Spudded | 15. Date T.D. Reached | 16. Date Completed | 17. Elevations (DF, RKB, RT, GL)* |
|---|---|---|---|
| 05/21/2010 | 06/04/2010 | ☐ D & A ☑ Ready to Prod. 06/24/2010 | 5459' GL 5471' KB |

| 18. Total Depth: | 19. Plug Back T.D.: | 20. Depth Bridge Plug Set: |
|---|---|---|
| MD 6538' TVD 6423' | MD 6501' TVD 6385 | MD TVD |

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
DUAL IND GRD, SP, COMP. DENSITY,COMP. NEUTRON,GR,CALIPER, CMT BOND

22. Was well cored? ☑ No ☐ Yes (Submit analysis)
Was DST run? ☑ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☑ Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

| Hole Size | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sks. & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|---|---|---|---|---|---|---|---|---|---|
| 12-1/4" | 8-5/8" J-55 | 24# | 0 | 544' | | 250 CLASS G | | | |
| 7-7/8" | 5-1/2" J-55 | 15.5# | 0 | 6526' | | 250 PRIMLITE | | 52' | |
| | | | | | | 400 50/50 POZ | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

24. Tubing Record

| Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|---|---|---|---|---|---|---|---|---|
| 2-7/8" | EOT@ 5838' | TA @ 5676' | | | | | | |

25. Producing Intervals / 26. Perforation Record

| Formation | Top | Bottom | Perforated Interval | Size | No. Holes | Perf. Status |
|---|---|---|---|---|---|---|
| A) Green River | | | 5659-5757' A3 LODC | .36" | 3 | 42 |
| B) Green River | | | 5550-5558' A.5 | .36" | 3 | 24 |
| C) Green River | | | 4910-5106' Xstray D1 | .36" | 3 | 27 |
| D) Green River | | | | | | |

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

| Depth Interval | Amount and Type of Material |
|---|---|
| 5659-5757' | Frac w/ 176648#'s 20/40 sand in 1030 bbls of Lightning 17 fluid. |
| 5550-5558' | Frac w/ 14353#'s 20/40 sand in 123 bbls of Lightning 17 fluid. |
| 4910-5106' | Frac w/ 41804#'s 20/40 sand in 246 bbls of Lightning 17 fluid. |

28. Production - Interval A

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| 6-25-10 | 7-8-10 | 24 | → | 48 | 0 | 12 | | | 2-1/2" x 1-3/4" x 20' x 21' x 24' RHAC Pump |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | PRODUCING |

28a. Production - Interval B

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | | |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | |

*(See instructions and spaces for additional data on page 2)

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28b. Production - Interval C

| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

28c. Production - Interval D

| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

29. Disposition of Gas *(Solid, used for fuel, vented, etc.)*

USED FOR FUEL

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

GEOLOGICAL MARKERS

| Formation | Top | Bottom | Descriptions, Contents, etc. | Name | Top Meas. Depth |
|---|---|---|---|---|---|
| | | | | GARDEN GULCH MRK | 4057' |
| | | | | GARDEN GULCH 1 | 4260' |
| | | | | GARDEN GULCH 2 | 4385' |
| | | | | POINT 3 | 4659' |
| | | | | X MRKR | 4905' |
| | | | | Y MRKR | 4944' |
| | | | | DOUGALS CREEK MRK | 5076' |
| | | | | BI CARBONATE MRK | 5314' |
| | | | | B LIMESTON MRK | 5448' |
| | | | | CASTLE PEAK | 5952' |
| | | | | BASAL CARBONATE | 6379' |

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☑ Directional Survey

☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☑ Other: Drilling Daily Activity

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Lucy Chavez-Naupoto Title Administrative Assistant

Signature Date 07/14/2010

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

NEWFIELD

# NEWFIELD EXPLORATION

**USGS Myton SW (UT)**
**SECTION 36 T8S, R16E**
**H-36-8-16**

**Wellbore #1**

**Design: Actual**

# Standard Survey Report

**01 July, 2010**

HATHAWAY HB BURNHAM
DIRECTIONAL & MWD SERVICES

NEWFIELD

# HATHAWAY BURNHAM
## Survey Report

HATHAWAY BURNHAM
DIRECTIONAL & MWD SERVICES

| | | | |
|---|---|---|---|
| **Company:** | NEWFIELD EXPLORATION | **Local Co-ordinate Reference:** | Well H-36-8-16 |
| **Project:** | USGS Myton SW (UT) | **TVD Reference:** | H-36-8-16 @ 5471.0ft |
| **Site:** | SECTION 36 T8S, R16E | **MD Reference:** | H-36-8-16 @ 5471.0ft |
| **Well:** | H-36-8-16 | **North Reference:** | True |
| **Wellbore:** | Wellbore #1 | **Survey Calculation Method:** | Minimum Curvature |
| **Design:** | Actual | **Database:** | EDM 2003.21 Single User Db |

**Project** USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

| | | | |
|---|---|---|---|
| **Map System:** | US State Plane 1983 | **System Datum:** | Mean Sea Level |
| **Geo Datum:** | North American Datum 1983 | | |
| **Map Zone:** | Utah Central Zone | | |

**Site** SECTION 36 T8S, R16E, SEC 26 T8S, R16E

| | | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 7,202,697.00 ft | **Latitude:** | 40° 5' 3.401 N |
| **From:** | Lat/Long | **Easting:** | 2,045,250.00 ft | **Longitude:** | 110° 3' 10.915 W |
| **Position Uncertainty:** | 0.0 ft | **Slot Radius:** | " | **Grid Convergence:** | 0.93 ° |

**Well** H-36-8-16, SHL LAT 40 04 35.13, LONG -110 03 55.19

| | | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.0 ft | **Northing:** | 7,199,780.45 ft | **Latitude:** | 40° 4' 35.130 N |
| | **+E/-W** | 0.0 ft | **Easting:** | 2,041,800.06 ft | **Longitude:** | 110° 3' 55.900 W |
| **Position Uncertainty** | | 0.0 ft | **Wellhead Elevation:** | 5,471.0 ft | **Ground Level:** | 5,459.0 ft |

**Wellbore** Wellbore #1

| **Magnetics** | **Model Name** | **Sample Date** | **Declination (°)** | **Dip Angle (°)** | **Field Strength (nT)** |
|---|---|---|---|---|---|
| | IGRF200510 | 2009/07/16 | 11.55 | 65.88 | 52,506 |

**Design** Actual

**Audit Notes:**

| | | | | | |
|---|---|---|---|---|---|
| **Version:** | 1.0 | **Phase:** | ACTUAL | **Tie On Depth:** | 0.0 |

| **Vertical Section:** | **Depth From (TVD) (ft)** | **+N/-S (ft)** | **+E/-W (ft)** | **Direction (°)** |
|---|---|---|---|---|
| | 0.0 | 0.0 | 0.0 | 316.16 |

**Survey Program** **Date** 2010/07/01

| **From (ft)** | **To (ft)** | **Survey (Wellbore)** | **Tool Name** | **Description** |
|---|---|---|---|---|
| 537.0 | 6,539.0 | Survey #1 (Wellbore #1) | MWD | MWD - Standard |

**Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 537.0 | 0.30 | 202.95 | 537.0 | -1.3 | -0.5 | -0.6 | 0.06 | 0.06 | 0.00 |
| 568.0 | 0.30 | 203.00 | 568.0 | -1.4 | -0.6 | -0.6 | 0.00 | 0.00 | 0.16 |
| 598.0 | 0.31 | 203.70 | 598.0 | -1.6 | -0.7 | -0.7 | 0.04 | 0.03 | 2.33 |
| 629.0 | 0.51 | 244.50 | 629.0 | -1.7 | -0.8 | -0.7 | 1.10 | 0.65 | 131.61 |
| 660.0 | 0.66 | 261.90 | 660.0 | -1.8 | -1.1 | -0.5 | 0.74 | 0.48 | 56.13 |
| 691.0 | 1.16 | 288.10 | 691.0 | -1.7 | -1.6 | -0.1 | 2.06 | 1.61 | 84.52 |
| 721.0 | 1.56 | 292.62 | 721.0 | -1.5 | -2.3 | 0.5 | 1.38 | 1.33 | 15.07 |
| 752.0 | 2.04 | 292.12 | 752.0 | -1.1 | -3.2 | 1.4 | 1.55 | 1.55 | -1.61 |
| 783.0 | 2.40 | 298.27 | 782.9 | -0.6 | -4.3 | 2.5 | 1.39 | 1.16 | 19.84 |
| 813.0 | 2.85 | 294.30 | 812.9 | 0.0 | -5.5 | 3.8 | 1.62 | 1.50 | -13.23 |
| 858.0 | 3.50 | 298.71 | 857.8 | 1.1 | -7.7 | 6.2 | 1.54 | 1.44 | 9.80 |
| 904.0 | 3.90 | 302.86 | 903.7 | 2.6 | -10.3 | 9.0 | 1.05 | 0.87 | 9.02 |

NEWFIELD

# HATHAWAY BURNHAM
Survey Report

HATHAWAY BURNHAM
DIRECTIONAL & MWD SERVICES

| | | | |
|---|---|---|---|
| **Company:** | NEWFIELD EXPLORATION | **Local Co-ordinate Reference:** | Well H-36-8-16 |
| **Project:** | USGS Myton SW (UT) | **TVD Reference:** | H-36-8-16 @ 5471.0ft |
| **Site:** | SECTION 36 T8S, R16E | **MD Reference:** | H-36-8-16 @ 5471.0ft |
| **Well:** | H-36-8-16 | **North Reference:** | True |
| **Wellbore:** | Wellbore #1 | **Survey Calculation Method:** | Minimum Curvature |
| **Design:** | Actual | **Database:** | EDM 2003.21 Single User Db |

**Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 949.0 | 4.42 | 312.42 | 948.6 | 4.6 | -12.8 | 12.2 | 1.92 | 1.16 | 21.24 |
| 994.0 | 5.14 | 307.24 | 993.5 | 7.0 | -15.7 | 16.0 | 1.86 | 1.60 | -11.51 |
| 1,040.0 | 5.71 | 308.01 | 1,039.3 | 9.7 | -19.2 | 20.3 | 1.25 | 1.24 | 1.67 |
| 1,085.0 | 6.20 | 312.82 | 1,084.0 | 12.7 | -22.7 | 24.9 | 1.55 | 1.09 | 10.69 |
| 1,130.0 | 7.20 | 313.89 | 1,128.7 | 16.3 | -26.5 | 30.1 | 2.24 | 2.22 | 2.38 |
| 1,175.0 | 8.17 | 317.50 | 1,173.3 | 20.6 | -30.7 | 36.2 | 2.41 | 2.16 | 8.02 |
| 1,221.0 | 8.80 | 316.62 | 1,218.8 | 25.6 | -35.3 | 42.9 | 1.40 | 1.37 | -1.91 |
| 1,266.0 | 9.27 | 318.57 | 1,263.2 | 30.8 | -40.1 | 50.0 | 1.25 | 1.04 | 4.33 |
| 1,310.0 | 10.29 | 316.66 | 1,306.6 | 36.3 | -45.1 | 57.5 | 2.43 | 2.32 | -4.34 |
| 1,356.0 | 11.23 | 318.71 | 1,351.8 | 42.7 | -50.9 | 66.1 | 2.21 | 2.04 | 4.46 |
| 1,401.0 | 11.82 | 317.48 | 1,395.9 | 49.4 | -56.9 | 75.0 | 1.42 | 1.31 | -2.73 |
| 1,446.0 | 12.13 | 316.16 | 1,439.9 | 56.2 | -63.3 | 84.4 | 0.92 | 0.69 | -2.93 |
| 1,537.0 | 13.47 | 317.15 | 1,528.6 | 70.9 | -77.1 | 104.5 | 1.49 | 1.47 | 1.09 |
| 1,627.0 | 13.80 | 315.94 | 1,616.1 | 86.3 | -91.7 | 125.8 | 0.48 | 0.37 | -1.34 |
| 1,718.0 | 13.67 | 315.59 | 1,704.5 | 101.7 | -106.8 | 147.4 | 0.17 | -0.14 | -0.38 |
| 1,808.0 | 14.48 | 313.54 | 1,791.8 | 117.1 | -122.4 | 169.2 | 1.06 | 0.90 | -2.28 |
| 1,898.0 | 13.69 | 312.71 | 1,879.1 | 132.1 | -138.4 | 191.1 | 0.91 | -0.88 | -0.92 |
| 1,989.0 | 13.80 | 308.80 | 1,967.5 | 146.2 | -154.8 | 212.6 | 1.03 | 0.12 | -4.30 |
| 2,079.0 | 13.34 | 308.64 | 2,055.0 | 159.4 | -171.2 | 233.6 | 0.51 | -0.51 | -0.18 |
| 2,170.0 | 12.72 | 306.45 | 2,143.6 | 171.9 | -187.5 | 253.8 | 0.87 | -0.68 | -2.41 |
| 2,260.0 | 13.18 | 309.17 | 2,231.4 | 184.3 | -203.4 | 273.8 | 0.85 | 0.51 | 3.02 |
| 2,351.0 | 13.51 | 306.36 | 2,319.9 | 197.1 | -220.0 | 294.6 | 0.80 | 0.36 | -3.09 |
| 2,441.0 | 13.40 | 309.57 | 2,407.4 | 210.0 | -236.5 | 315.3 | 0.84 | -0.12 | 3.57 |
| 2,532.0 | 13.25 | 310.60 | 2,496.0 | 223.5 | -252.6 | 336.1 | 0.31 | -0.16 | 1.13 |
| 2,622.0 | 14.19 | 312.42 | 2,583.4 | 237.6 | -268.5 | 357.4 | 1.15 | 1.04 | 2.02 |
| 2,713.0 | 15.40 | 311.63 | 2,671.4 | 253.2 | -285.8 | 380.6 | 1.35 | 1.33 | -0.87 |
| 2,804.0 | 15.93 | 311.48 | 2,759.0 | 269.5 | -304.2 | 405.1 | 0.58 | 0.58 | -0.16 |
| 2,894.0 | 15.34 | 313.06 | 2,845.7 | 285.8 | -322.2 | 429.3 | 0.81 | -0.66 | 1.76 |
| 2,985.0 | 14.26 | 307.86 | 2,933.7 | 300.9 | -339.8 | 452.4 | 1.88 | -1.19 | -5.71 |
| 3,076.0 | 14.61 | 309.94 | 3,021.8 | 315.1 | -357.4 | 474.9 | 0.69 | 0.38 | 2.29 |
| 3,166.0 | 14.35 | 314.75 | 3,108.9 | 330.3 | -374.1 | 497.3 | 1.37 | -0.29 | 5.34 |
| 3,257.0 | 14.22 | 319.12 | 3,197.1 | 346.7 | -389.4 | 519.8 | 1.19 | -0.14 | 4.80 |
| 3,347.0 | 13.67 | 319.89 | 3,284.5 | 363.2 | -403.5 | 541.4 | 0.64 | -0.61 | 0.86 |
| 3,438.0 | 12.15 | 315.89 | 3,373.2 | 378.3 | -417.1 | 561.7 | 1.94 | -1.67 | -4.40 |
| 3,529.0 | 13.06 | 316.13 | 3,462.0 | 392.6 | -430.9 | 581.6 | 1.00 | 1.00 | 0.26 |
| 3,619.0 | 11.96 | 313.21 | 3,549.8 | 406.3 | -444.7 | 601.1 | 1.41 | -1.22 | -3.24 |
| 3,710.0 | 11.71 | 312.25 | 3,638.9 | 418.9 | -458.4 | 619.7 | 0.35 | -0.27 | -1.05 |
| 3,801.0 | 11.76 | 313.17 | 3,728.0 | 431.5 | -472.0 | 638.2 | 0.21 | 0.05 | 1.01 |
| 3,891.0 | 11.21 | 312.53 | 3,816.2 | 443.7 | -485.2 | 656.1 | 0.63 | -0.61 | -0.71 |
| 3,982.0 | 11.10 | 309.39 | 3,905.5 | 455.2 | -498.4 | 673.6 | 0.68 | -0.12 | -3.45 |
| 4,073.0 | 10.39 | 312.73 | 3,994.9 | 466.3 | -511.2 | 690.5 | 1.04 | -0.78 | 3.67 |
| 4,163.0 | 9.40 | 307.59 | 4,083.6 | 476.3 | -523.0 | 705.8 | 1.47 | -1.10 | -5.71 |
| 4,254.0 | 10.31 | 306.80 | 4,173.2 | 485.7 | -535.4 | 721.2 | 1.01 | 1.00 | -0.87 |
| 4,345.0 | 10.42 | 309.46 | 4,262.7 | 495.9 | -548.3 | 737.4 | 0.54 | 0.12 | 2.92 |
| 4,435.0 | 10.44 | 314.11 | 4,351.2 | 506.7 | -560.4 | 753.7 | 0.94 | 0.02 | 5.17 |
| 4,526.0 | 9.71 | 315.78 | 4,440.8 | 517.9 | -571.7 | 769.6 | 0.86 | -0.80 | 1.84 |
| 4,616.0 | 9.40 | 314.25 | 4,529.6 | 528.5 | -582.3 | 784.5 | 0.45 | -0.34 | -1.70 |
| 4,707.0 | 9.76 | 315.17 | 4,619.3 | 539.2 | -593.0 | 799.7 | 0.43 | 0.40 | 1.01 |
| 4,798.0 | 9.34 | 312.53 | 4,709.1 | 549.6 | -603.9 | 814.7 | 0.67 | -0.46 | -2.90 |
| 4,888.0 | 9.87 | 314.27 | 4,797.8 | 559.9 | -614.8 | 829.7 | 0.67 | 0.59 | 1.93 |
| 4,979.0 | 10.59 | 315.41 | 4,887.3 | 571.3 | -626.3 | 845.9 | 0.82 | 0.79 | 1.25 |
| 5,069.0 | 10.09 | 312.73 | 4,975.9 | 582.6 | -637.9 | 862.0 | 0.77 | -0.56 | -2.98 |
| 5,160.0 | 10.72 | 314.38 | 5,065.4 | 593.9 | -649.8 | 878.4 | 0.77 | 0.69 | 1.81 |
| 5,250.0 | 10.17 | 312.05 | 5,153.9 | 605.1 | -661.7 | 894.7 | 0.77 | -0.61 | -2.59 |

NEWFIELD

# HATHAWAY BURNHAM
Survey Report

HATHAWAY BURNHAM
DIRECTIONAL & MWD SERVICES

| | | | |
|---|---|---|---|
| **Company:** | NEWFIELD EXPLORATION | **Local Co-ordinate Reference:** | Well H-36-8-16 |
| **Project:** | USGS Myton SW (UT) | **TVD Reference:** | H-36-8-16 @ 5471.0ft |
| **Site:** | SECTION 36 T8S, R16E | **MD Reference:** | H-36-8-16 @ 5471.0ft |
| **Well:** | H-36-8-16 | **North Reference:** | True |
| **Wellbore:** | Wellbore #1 | **Survey Calculation Method:** | Minimum Curvature |
| **Design:** | Actual | **Database:** | EDM 2003.21 Single User Db |

**Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 5,341.0 | 10.94 | 308.64 | 5,243.4 | 615.9 | -674.4 | 911.3 | 1.09 | 0.85 | -3.75 |
| 5,392.6 | 10.36 | 309.07 | 5,294.0 | 621.8 | -681.8 | 920.8 | 1.13 | -1.12 | 0.84 |
| **H-36-8-16 TGT** | | | | | | | | | |
| 5,431.0 | 9.93 | 309.43 | 5,331.9 | 626.1 | -687.0 | 927.5 | 1.13 | -1.12 | 0.93 |
| 5,522.0 | 9.65 | 312.05 | 5,421.5 | 636.2 | -698.8 | 942.9 | 0.58 | -0.31 | 2.88 |
| 5,613.0 | 11.25 | 313.96 | 5,511.0 | 647.5 | -710.8 | 959.4 | 1.80 | 1.76 | 2.10 |
| 5,703.0 | 10.79 | 313.83 | 5,599.4 | 659.4 | -723.2 | 976.6 | 0.51 | -0.51 | -0.14 |
| 5,794.0 | 11.04 | 311.42 | 5,688.7 | 671.1 | -735.9 | 993.7 | 0.57 | 0.27 | -2.65 |
| 5,885.0 | 9.32 | 307.41 | 5,778.3 | 681.3 | -748.3 | 1,009.7 | 2.04 | -1.89 | -4.41 |
| 5,975.0 | 9.07 | 299.59 | 5,867.1 | 689.3 | -760.2 | 1,023.7 | 1.41 | -0.28 | -8.69 |
| 6,066.0 | 9.91 | 297.52 | 5,956.9 | 696.4 | -773.4 | 1,038.0 | 1.00 | 0.92 | -2.27 |
| 6,156.0 | 10.44 | 300.86 | 6,045.5 | 704.2 | -787.3 | 1,053.2 | 0.88 | 0.59 | 3.71 |
| 6,247.0 | 10.68 | 305.83 | 6,134.9 | 713.3 | -801.2 | 1,069.5 | 1.03 | 0.26 | 5.46 |
| 6,338.0 | 10.55 | 306.77 | 6,224.4 | 723.3 | -814.7 | 1,086.0 | 0.24 | -0.14 | 1.03 |
| 6,428.0 | 9.43 | 305.72 | 6,313.0 | 732.5 | -827.3 | 1,101.4 | 1.26 | -1.24 | -1.17 |
| 6,488.0 | 8.66 | 304.02 | 6,372.3 | 737.9 | -835.0 | 1,110.6 | 1.36 | -1.28 | -2.83 |
| 6,539.0 | 8.66 | 304.02 | 6,422.7 | 742.2 | -841.4 | 1,118.1 | 0.00 | 0.00 | 0.00 |

**Wellbore Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| H-36-8-16 TGT | 0.00 | 0.00 | 5,300.0 | 606.0 | -653.0 | 7,200,375.88 | 2,041,137.40 | 40° 4' 41.119 N | 110° 4' 4.301 W |

- actual wellpath misses by 33.4ft at 5392.7ft MD (5294.2 TVD, 621.9 N, -681.8 E)
- Circle (radius 75.0)

Checked By: _____ Approved By: _____ Date: _____

NEWFIELD

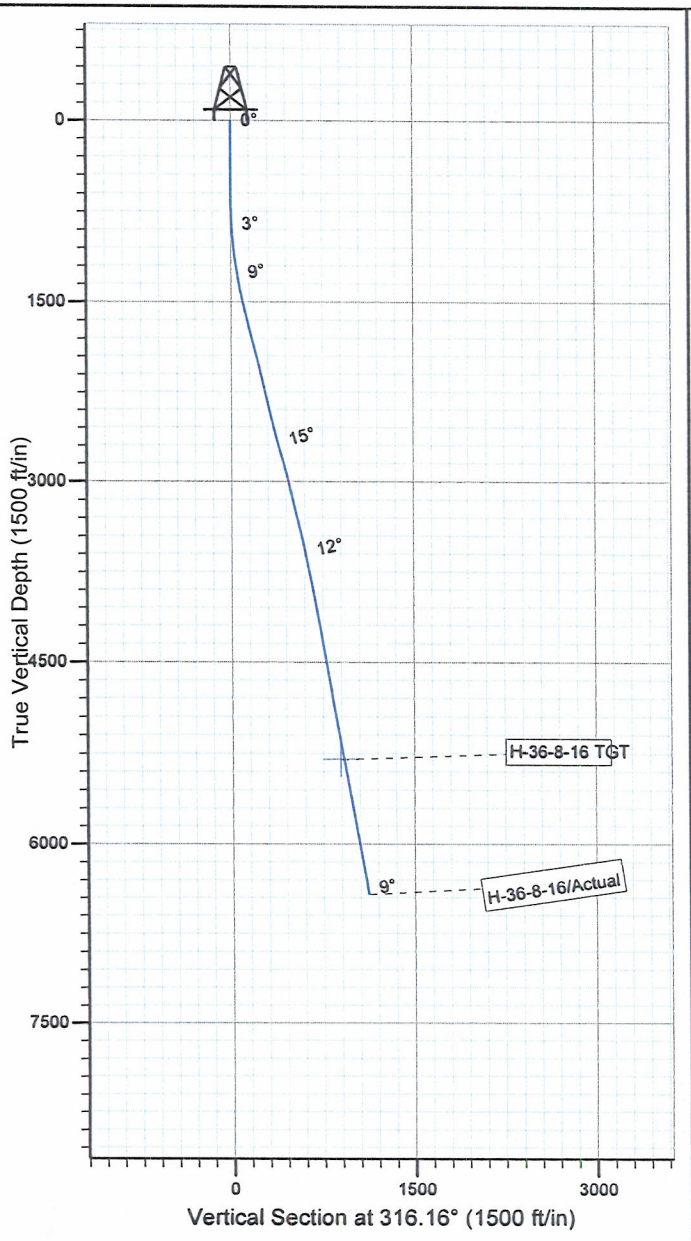
Project: USGS Myton SW (UT)
Site: SECTION 36 T8S, R16E
Well: H-36-8-16
Wellbore: Wellbore #1
SURVEY: Actual

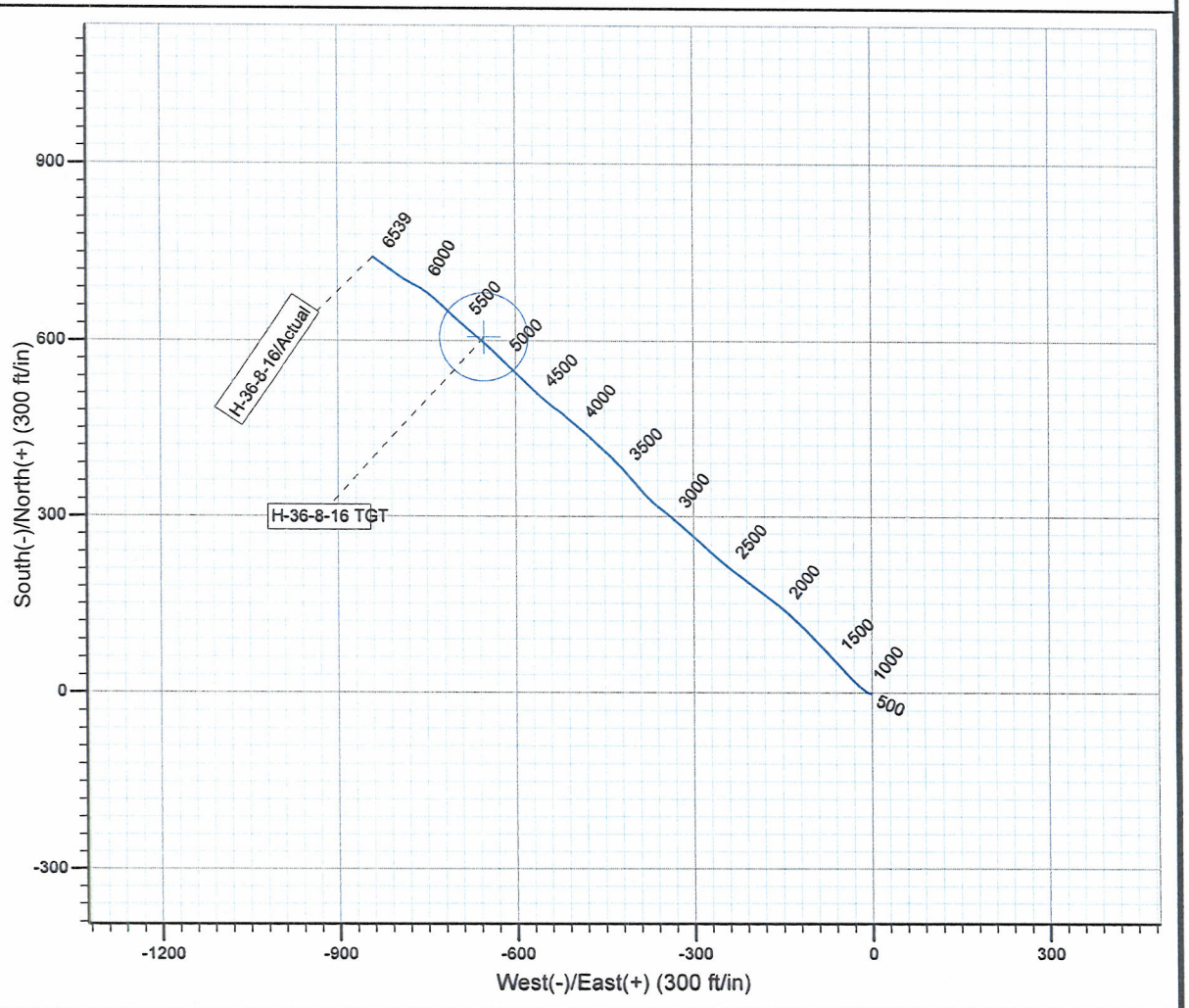
FINAL SURVEY REPORT

T M

Azimuths to True North
Magnetic North: 11.55°

Magnetic Field
Strength: 52506.4snT
Dip Angle: 65.88°
Date: 2009/07/16
Model: IGRF200510




HATHAWAY HB BURNHAM
DIRECTIONAL & MWD SERVICES

Design: Actual (H-36-8-16/Wellbore #1)

Created By: Jim Hudson Date: 21:09, July 01 2010

*THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.*

# Daily Activity Report

**Format For Sundry**

## MON BUTTE EAST H-36-8-16

**3/1/2010 To 7/30/2010**

**MON BUTTE EAST H-36-8-16** **Waiting on Cement**

**Date:** 5/26/2010

Ross #21 at 545. Days Since Spud - Mixed @ 15.8ppg W/ 1.17 Yield. Retuned 6bbls Cement to pit. - On 5/25/10 R/U BJ and Cement W/ 250sks of Class "G"+2%CaCl+.25#sk Cello Flake - On 5/21/10 Spud W/ Ross Rig # 21. Drill 545' of 12 1/4" hole, run 12jts 8 5/8" casing set @ 543.88KB

**Daily Cost:** $0

**Cumulative Cost:** $51,680

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**MON BUTTE EAST H-36-8-16** **Drill 7 7/8" hole with fresh water**

**Date:** 6/2/2010

Capstar #328 at 2402. 1 Days Since Spud - Strap BHA and rig up flare lines - Drill 7 7/8" hole F/ 479' to 2402' w/ 18K WOB,TRPM-184,GPM-415,Avg ROP-183 ft/hr - Move rig 10 miles w/ Howcroft and set equipment and Nipple up - No H2S reported in last 24 hours - R/U B&C and test kelly,choke,pipe&blind rams to 2000#/10min and Hydrill 1500#,casing 1500#/30min - P/U bit,m.m, directional tools ,HWDP and TIH, Tag @ 479'

**Daily Cost:** $0

**Cumulative Cost:** $112,175

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**MON BUTTE EAST H-36-8-16** **Drill 7 7/8" hole with fresh water**

**Date:** 6/3/2010

Capstar #328 at 5075. 2 Days Since Spud - Rig Service, function test BOP and Crownomatic - Drill 7 7/8" hole f/ 3807' to 5075' w/ 20K WOB,TRPMP-184,GPM-409,Avg ROP- 85 ft/hr - Drill 7 7/8" hole F/ 2402' to 3807' w/ 20K WOB,TRPM-184,GPM-409,Avg ROP-165 ft/hr - No H2S or flow reported in last 24 hours

**Daily Cost:** $0

**Cumulative Cost:** $133,699

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**MON BUTTE EAST H-36-8-16** **Lay Down Drill Pipe/BHA**

**Date:** 6/4/2010

Capstar #328 at 6538. 3 Days Since Spud - Drill 7 7/8" hole F/ 5075' to 5845' w/ 20K WOB,TRPM-184,GPM-409,Avg ROP- 86 ft/hr - Drill 7 7/8" hole F/5845' to 6538' TD w/20K WOB,TRPM-184,GPM-409, Avg ROP- 77 ft/hr - Pump sweep, and circulate hole clean for lay down to log - Lay down drill pipe and BHA, directional tools - NO H2S or flow reported in last 24 hours - Rig Service, check crownomatic and BOP

**Daily Cost:** $0

**Cumulative Cost:** $189,831

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**MON BUTTE EAST H-36-8-16** **Wait on Completion**

**Date:** 6/5/2010

Capstar #328 at 6538. 4 Days Since Spud - R/U and run 150 jts of 5.5",J55,15.5#,LTC set @ 6526.19', - Circulate - R/U BJ Head,Test lines to 3500#, cement w/250 sks of lead @ 11ppg & 3.53 yield (PL II+3%KCL + .5#/sk - CF+FP+6L) pump 400 sks of tail @ 14.4 ppg & 1.24 yield ( 50:50:2+3%KCL +.25#/CF+EC-1+FP) displace - R/U PSI and log F/6318' to surface (triple combo,porosity,resistivity) - Nipple down and set slips - Clean mud tanks - Release Rig @ 2300 6-4-10 - 154.8 bbls of fresh, returned 10 bbls back to pit,bump plug 2299 psi.BLM&

State notified via email **Finalized**
**Daily Cost:** $0
**Cumulative Cost:** $290,691

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**Pertinent Files:** Go to File List